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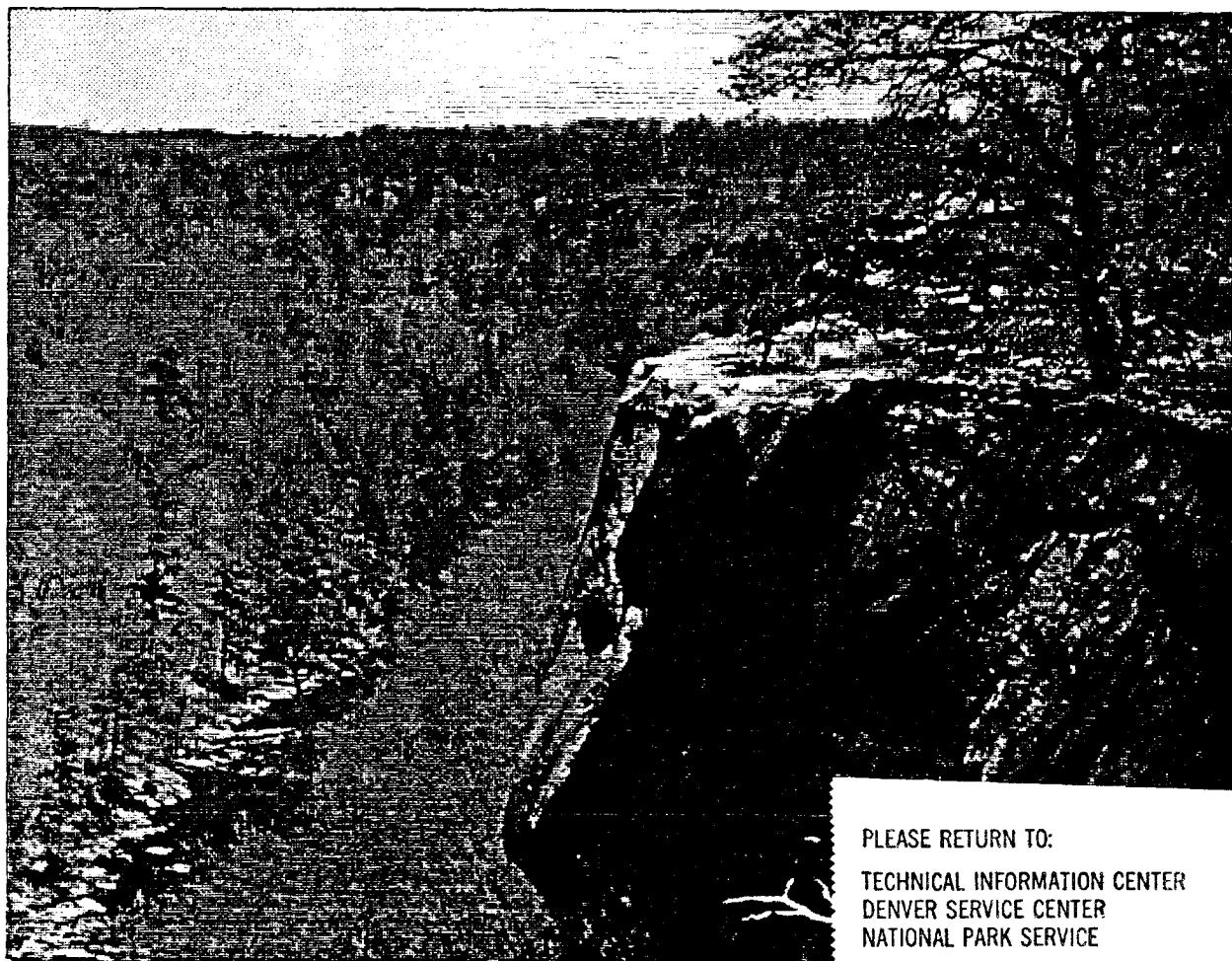
SPECIAL RESOURCE STUDY

LITTLE RIVER CANYON AREA

CHEROKEE, DEKALB AND ETOWAH COUNTIES

ALABAMA

1991



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A purpose of this document is to provide preliminary information for further consideration and discussion. The ideas presented have been neither approved nor disapproved.

The opinions, positions, and conclusions represented in this study are those of the study team. They should not be considered to represent official National Park Service policy. A final National Park Service position will be determined after public and Washington office reviews.

Public comments and suggestions on the Little River Canyon Area/Special Resource Study are welcomed. Letters should be sent to:

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"Thousands of nerve-shaken, overcivilized people are beginning to find out that going to the mountains is going home; that wildness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers but as fountains of life."

-John Muir, 1898

INTRODUCTION AND BACKGROUND

BACKGROUND

The Little River Canyon area is located in northeastern Alabama on top of Lookout Mountain about halfway between Gadsden, Alabama and Chattanooga, Tennessee. The mountain is approximately 100 miles long. The canyon is about 100 miles north of Birmingham, Alabama and 110 miles west of Atlanta, Georgia. The mountain, near Fort Payne, Alabama, is bounded on the east by Shinbone Valley and on the west by Wills Valley. Although the area is predominately rural, there are several large industrial and urban centers; notably, Birmingham, Gadsden, Huntsville (Alabama), and Chattanooga (Tennessee) within commuting distance.

As a result of congressional interest in the area, especially by Representative Tom Beville (D-4), the National Park Service was directed by Congress to prepare an assessment of the northeastern Alabama counties of Cherokee, DeKalb, and Etowah to determine if any of the counties possessed resource values of significance and, as a result, warranted further study. That assessment was conducted in the fall of 1988. The results were made available shortly thereafter. Interest in the project as directed by congressional action continued, focusing on the two areas worthy of further study: The Little River Canyon and its environs, and the Tennessee/Alabama/Georgia (TAG) Rail Line.

Congress appropriated funds through the National Park Service's 1989 Appropriation Bill to conduct a special resource study to focus on these two areas, to determine national significance and to present management alternatives.

PREVIOUS STUDIES

The Little River Canyon was identified for possible national natural landmark consideration in the 1970's. An onsite evaluation was completed in 1989. The evaluation addressed approximately 1,500 acres and encompassed a portion of the canyon, DeSoto Falls and DeSoto State Park. The evaluation describes the Little River Canyon as "the most extensive canyon system of the Cumberland Plateau Section of the Appalachian Mountains Division. The site contains examples of typical plant community types for sandstone substrates. Outcrops of sandstone support prime examples of successional communities from shallow vernal pools to shrub zones along the periphery".

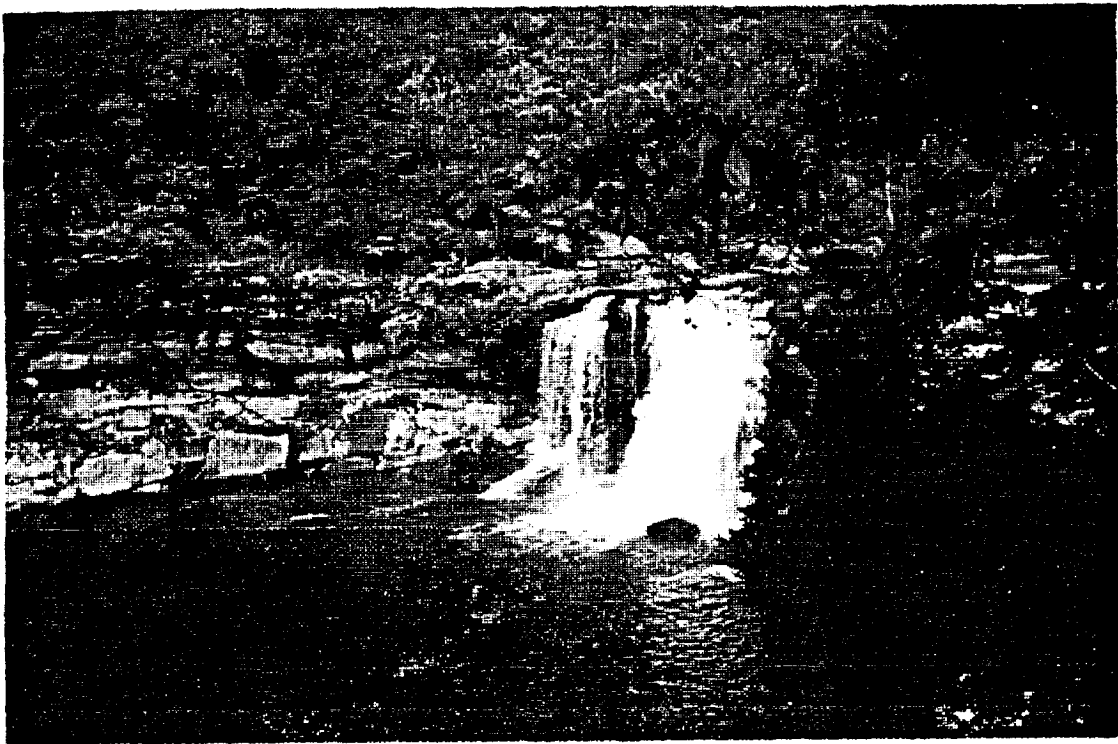
The National Rivers Inventory conducted in 1978 concluded that this section of the Little River is truly an outstanding area and has potential to become a component of the National Wild and Scenic Rivers System. The river flows from the top of the mountain (Lookout Mountain) into one of the deeper canyons east of the Mississippi River, rising to 700 feet above the river.

LIMITATIONS OF THE STUDY

The ideas presented herein are preliminary concepts that will be refined through the National Park Service planning process, if Congress authorizes a new unit encompassing all or part of the study area.

Studies by the National Park Service provide the basis upon which the Director, National Park Service; the Secretary of the Interior; the Office of Management and Budget; involved members of Congress; the Interior Committees; and others may formulate recommendations and arrive at decisions concerning the relative desirability, practicality, and priority of a legislative proposal.

PURPOSE



PURPOSE OF THE STUDY

The purpose of this study is to meet the congressional mandate calling for a new area/special resource study to be conducted in three northeastern counties of Alabama. Fundamental to this discourse are the three basic tenets for qualification as a new area: national significance; suitability; and feasibility. Each of these items is discussed consecutively elsewhere in this study.

1. National Significance--A proposed unit will be considered nationally significant if it meets all four of the following standards.

It is an outstanding example of a particular type of resource.

It possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our Nation's heritage.

It offers superlative opportunities for recreation, for public use and enjoyment, or for scientific study.

It retains a high degree of integrity as a true, accurate, and relatively unspoiled example of the resource.

A combination of natural, scenic, scientific, and other values together with recreational opportunities may satisfy National Park Service standards even if the individual resources would not independently be considered of national significance.

2. Suitability--To be suitable for inclusion in the System, an area must represent a natural or cultural theme or type of recreational resource that is not already adequately represented in the National Park System or is not comparably represented and protected for public enjoyment by another land managing entity. Adequacy of representation is determined on a case-by-case basis by comparing the proposed area to other units in the National Park System for differences or similarities in the character, quality, quantity, or combination of resources and opportunities for public enjoyment. There are no guidelines stating that themes cannot overlap those in existing National Park Service areas.

3. Feasibility--To be feasible as a new unit of the National Park System, an area's natural systems and/or historic settings must be of sufficient size and appropriate configuration to ensure long-term protection of the resources and to accommodate public use. It must have potential for efficient administration at a reasonable cost. Important feasibility factors include landownership, acquisition costs, access, threats to the resource, staffing and development requirements.

In addition to addressing these three fundamental questions, this study will also provide: a description of the resource, four different alternatives to protect the resources, and an environmental assessment of these alternatives.

The concepts developed in this paper are designed to protect the integrity of the river environment while providing opportunities for appropriate visitor use and enjoyment of the river and surrounding areas.

The stream corridor will provide quality hiking, picnicking, floating, swimming, fishing, sightseeing, hunting, rock climbing, and other related recreational opportunities. Further, an expanded Little River Park will help meet the natural resources preservation and recreation needs of the region and the Nation as identified in the Alabama Statewide Comprehensive Outdoor Recreational Plan.

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

The Little River Area in northeastern Alabama is a biologically, geologically, and historically fascinating area that offers a wide array of recreational opportunities. The river flows atop a mountain for most of its length. Erosion has created a variety of superlative rock expanses, benches and bluffs that create a unique environment for several federally listed threatened and endangered species, various regionally unique recreational pursuits including kayaking and mountain climbing, and all within a context that has profoundly influenced the regional history.

The area, although influenced some by small farms, summer camps, seasonal dwellings, residences and other manmade intrusions (roads, bridges, and timbering), remains largely undeveloped and, within the canyon itself, extremely primitive. Ownership of the entire study area lies with over 400 governmental, individual, and corporate parties. However, much of the land is held by the State of Alabama and Alabama Power Company.

The area's natural resources are an outstanding example of a canyon system of the Appalachian Plateau Physiographic Province. Even if the river and canyon were not determined to be eligible individually for national recognition as a natural resource, the study area contains a combination of other scenic, aesthetic, scientific, and recreational features that collectively offers outstanding opportunities for public use and enjoyment. The study area's combination of physical features and proximity to urban populations is especially important in finding that its recreation potential is of national importance.

In order to provide for the use and protection of the area, four alternatives are considered:

- A. Designation of a 15,000-acre core area of primary resource lands consisting mainly of the river and canyon, and sufficient surrounding lands to provide for adequate protection, utilization and administration of the area.
- B. Designation of a 34,000-acre comprehensive area (which includes Alternative A) that provides for a more comprehensive coverage of the primary and secondary resources, and ensures that adequate long-term recreational demands for the area are met.
- C. The consideration of the area for future designation as a wild and scenic river, either within the context of Alternatives A and B or as a separate entity.
- D. A non-Federal ownership option which would rely on State, local, and private protection devices and potential Federal technical assistance to protect the area.

RESOURCE DESCRIPTION



RESOURCE DESCRIPTION

LOCATION

The watershed of the Little River is primarily on the southern end of the Cumberland Plateau of northeast Alabama. It is characterized by forested mountains, scenic river gorges, and small communities. It contains some of the most rugged scenery in the southeast. Elevations range from approximately 560 to 1,752 feet above mean sea level.

The Little River system is formed in a drainage basin of approximately 199 square miles. Headwaters of the Little River and its East Fork and Gilreath Creek tributaries are in Dade, Walker, and Chattooga Counties, Georgia. Little River flows southwesterly then easterly through DeKalb and Cherokee Counties, Alabama into Weiss Lake. The Little River flows through the Little River Wildlife Management Area administered by the Alabama Department of Conservation and Natural Resources, Game and Fish Division. The principal nearby towns in the area are Fort Payne, Mentone, Collinsville, Centre and Leesburg.

The study area is composed of four basic components: the Little River Canyon, Yellow Creek Falls, Cherokee Rock Village, and the TAG Rail Line.

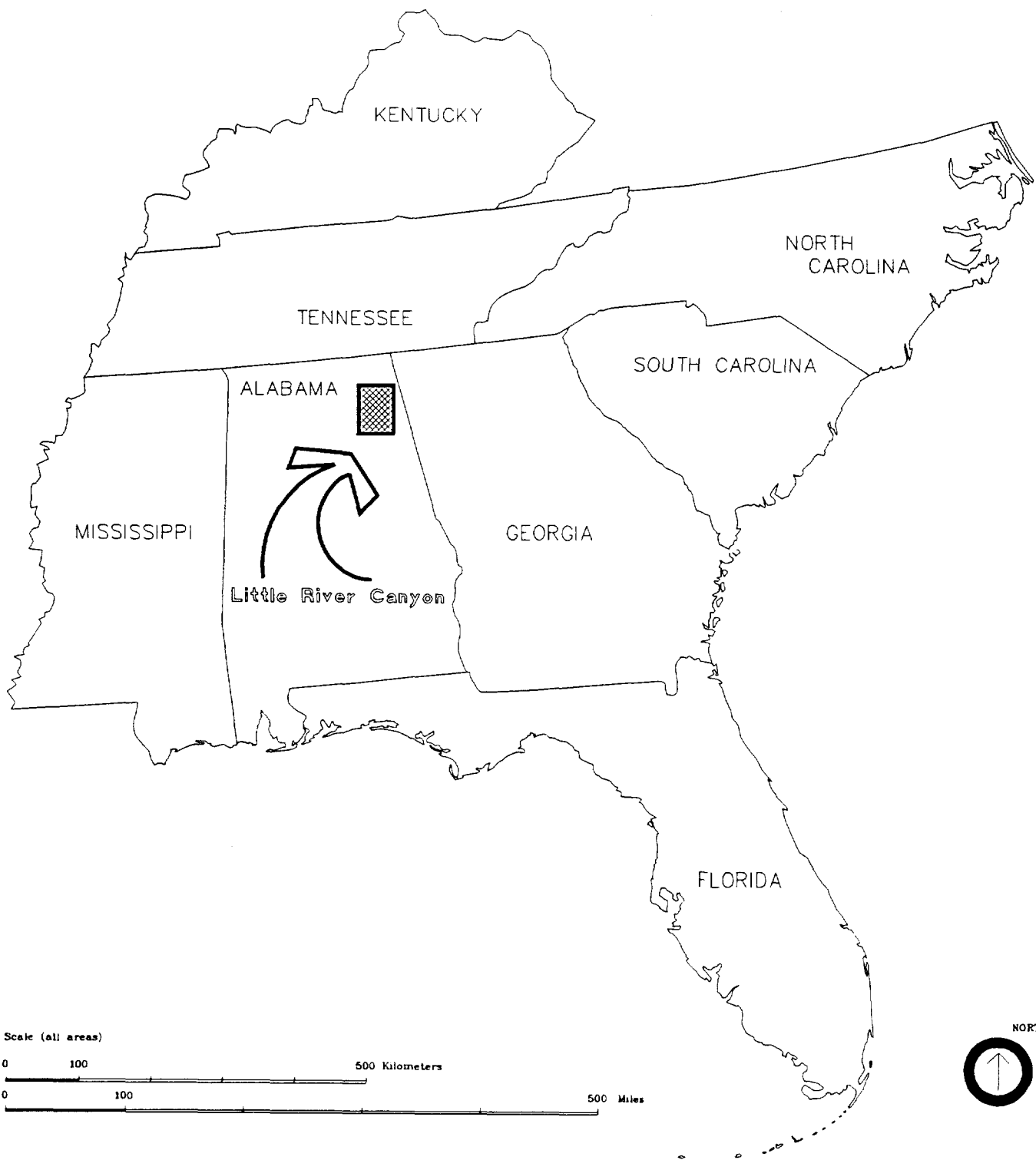
The Basic Resources

The Little River Canyon area together with the whole of Lookout Mountain (Tennessee, Alabama, and Georgia) has long been recognized as an area with important natural and cultural resources. Together the Little River and Little River Canyon area form one of the extraordinary natural features of Alabama. Little River exists in an unpolluted and near pristine condition and flows unimpeded through five minor impoundments. The river and canyon have a history dating back several centuries. Little River, its canyon, and surrounding environment, comprise an outstanding and rare natural phenomenon of immeasurable wealth to residents, national visitors, and to future generations.

In 1969, the Alabama Legislature designated the Little River, south of the Alabama State Highway 35 bridge to the mouth of the canyon, as a State Wild and Scenic River. While the concept of a national recreation area expands the scope of consideration to additional areas, the Bureau of Outdoor Recreation in 1970 prepared "A Concept for Recreational Development of a Wild and Scenic River for the State of Alabama". This action is an indicator of the stream's value to the State and to the Nation. The Rivers Inventory Study conducted in 1978 by the Heritage Conservation and Recreation Service concluded that this section of the Little River is truly an outstanding area and well worth inclusion in the National Wild and Scenic River System. It is unique because it is the only river that forms and flows for almost all of its entire length on the top of a mountain. Legislative action with the State is underway to declare Little River an "Outstanding National Resource Water."

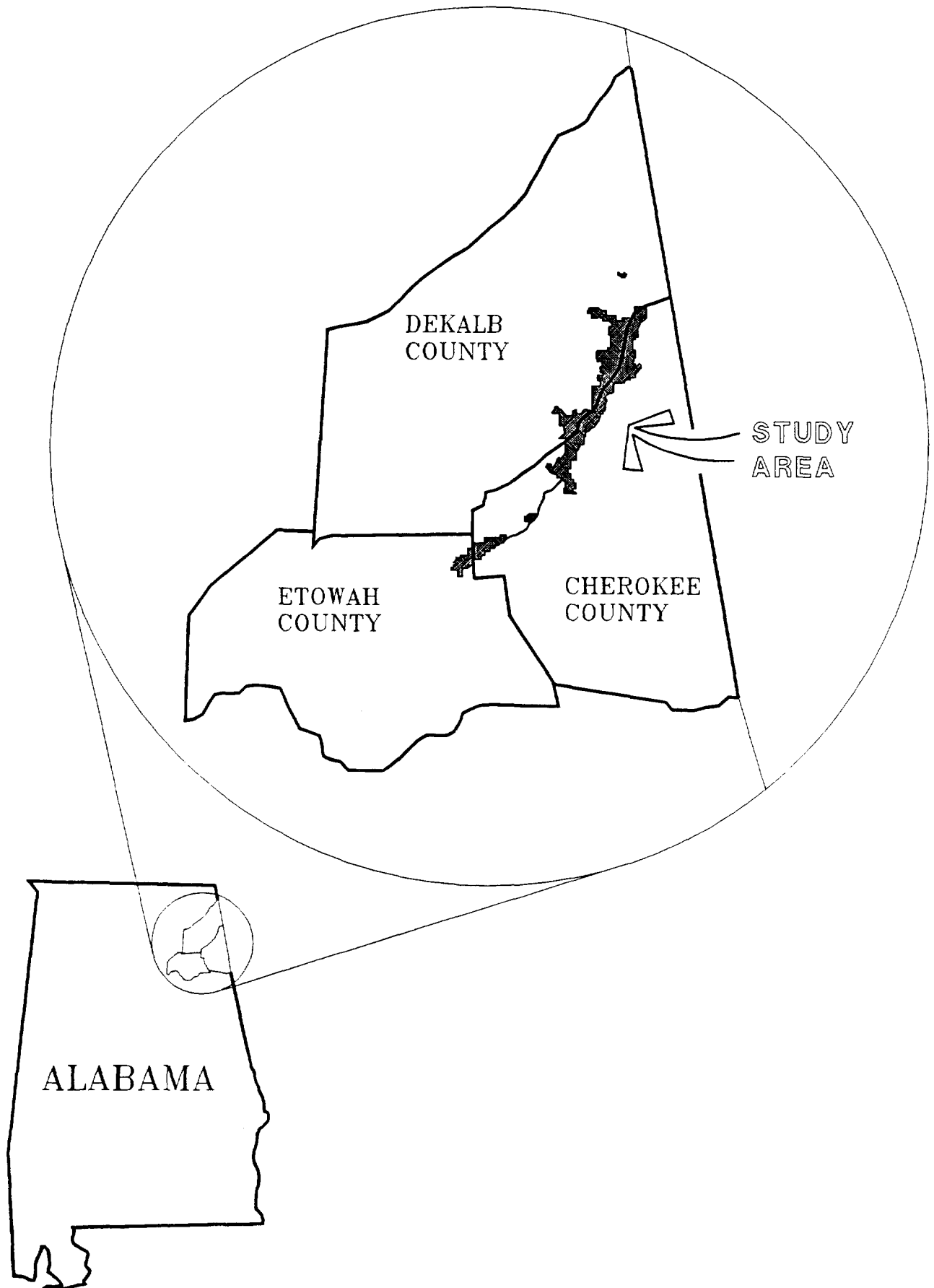
Current Uses

There is virtually no development on the Little River below Alpine which is located at the north end of the study area. Much of the land along the river is State and county parks or holdings of large corporations such as Alabama Power. Portions of the river and canyon are



REGIONAL LOCATION MAP

VICINITY MAP



managed from DeSoto State Park. The land has been subdivided in numerous places with smaller ownerships. One small section has a defunct amusement park above the river with a chair lift into the canyon.

Numerous small waterfalls and creeks dot the landscape along with massive sandstone bluffs, large expanses of rocks, rapids, and rock outcrops.

A rim road on the western side of the canyon allows the visitor to view the splendor of the canyon from a series of overlooks along a 23 mile drive. For about 6 months a year; rafters, kayakers, and canoeists float the waters. Periodically, rapellers and rock climbers can be seen at favorite spots on the canyon walls. Alabama Power Company's 10,000 acres and Georgia Kraft's 1,400 acres adjoin the 5,000 acres of State lands. These areas are managed for timber resources and wildlife. The Department of the Interior transferred the land to the State in the 1930s. Structures constructed by the Civilian Conservation Corps are still utilized in the State park.

The upper corridor areas (the west and east forks of Little River), outside the proposed protection area, from DeSoto Falls Dam downstream to Alpine and Lake Lahusage Dam downstream to about the same latitude as Alpine are threatened by unsympathetic development. These areas have been subdivided into small parcels with development that often encroaches on the river. The area has an abundance of summer youth camps, as well as, a religious conference center which borders the stream corridors.

DeSoto State Park, inside the north end of the protection area, offers cabins, campgrounds, a resort lodge, hiking trails, picnic area, nature center, and country store for the visitor. This area is located only 8 miles northeast of Fort Payne and 4 miles below Mentone, a small mountain community characterized by the charm of mountain stone and board construction. Mentone is found at the northern end of the study area.

At the south end of Little River is found, just before it enters Weiss Lake, the 130-acre Little River Canyon Mouth Park operated by Cherokee County. This area offers 51 campsites with electric hookup, 41 primitive campsites on the banks of the river, picnicking, access to the Alabama Appalachian Association JFK Trail, and a country store. Picnicking, fishing, tubing, playground, and hot and cold showers are features of the park.

The Yellow Creek Falls area, located between Little River Canyon Mouth Park and Cherokee Rock Village, in addition to the spectacular high falls and massive sandstone bluffs, is an outstanding undeveloped boat launch location used by fishermen and boaters as access to Weiss Lake. It is not uncommon to see 50 to 60 boats using just the bay area on a pretty day. Weiss Lake is a 30,200 acre impoundment of the Coosa, Chattooga, and Little Rivers which is known to consistently produce 2-pound crappie. Weiss Lake is appropriately known as "The Crappie Capitol of the World."

Another 200-acre undeveloped parcel owned by Cherokee County is known as Cherokee Rock Village. The Cherokee Rock Village unit is comprised of 3,556 acres surrounding the county lands. This unit, extending into Etowah County, is rural and undeveloped although there are timber harvesting operations now underway. Spectacular views of the valley floor and Weiss Lake can be found at this location.

A 9-mile portion of the abandoned TAG Rail Line which parallels the mountain in the valley floor is envisioned as a connector between Little River Canyon Mouth Park, the Yellow Creek Falls unit, and the Cherokee Rock Village unit. The abandoned rail line can provide access between the units for hikers, bikers, and trail riders.

The Upper Corridors and Head River

As previously mentioned, the upper corridors (the west and east forks of Little River outside the envisioned park) from DeSoto Falls Dam downstream to Alpine and Lake Lahusage Dam downstream to about the same latitude are threatened by unsympathetic development. While these corridors are not envisioned for incorporation into a park, they should be closely monitored by the State and others to ensure that their fragile nature and the resources included within them are not damaged. It is evident that subdivisions have been platted along the upper streams with a number of owners building walkways, boardwalks, concrete docks, and stairs into the flood plain and to the edge of the stream.

Population

Within a 250-mile radius of Little River are 12 principal cities: Columbia, South Carolina; Asheville, North Carolina; Knoxville, Tennessee; Bowling Green, Kentucky; Memphis and Chattanooga, Tennessee; Huntsville, Birmingham, Tuscaloosa, and Montgomery, Alabama; Columbus, Atlanta, and Augusta, Georgia.

According to data published by the Bureau of the Census, the total 1980 population of the three counties of the Little River Canyon region was 178,475. Each of the counties has experienced a significant gain in population over the last 10 years. The 1986 population of Fort Payne was 11,740. Projected population growth for the three-county area in the year 1990 is 188,012 which represents growth in all three counties. Contributing to this total are Cherokee (21,505); DeKalb (60,002) and Etowah (106,505).

Based on 1980 census figures, Cherokee County has a land area of 553 square miles with a population density per square mile of approximately 34; DeKalb at 778 square miles has approximately 69 and Etowah at 542 square miles has a density at 190.

Economy

Commercial agriculture is severely hampered by the steep topography and shallow soils of most of the study area. Beyond the immediate stream corridors, however, the relatively level land of the plateau, particularly in the southeastern and northwestern portions of DeKalb and Cherokee Counties, respectively, is suited for agriculture.

Cash receipts from farm marketing (total farm and forestry receipts) for DeKalb, Cherokee, and Etowah Counties totaled \$161,127,000 in 1983 compared with \$188,048,000 in 1987, an increase of about 16.7 percent. Overall agricultural sales in the State for the same period increased by 10.8 percent. Agricultural sales in 1987 for the three counties represented 13.6 percent of the State's total. Since 1978 the total number of farms in the counties has decreased while the average farm size is approximately 152 acres. The average value per acre of farm real estate land and buildings in Alabama was \$800 in 1987. Cherokee County averaged \$769, DeKalb \$1,055, and Etowah \$1,027 for the same year. Poultry, beef and nursery production are principal sources of farm income. There has been a significant decline in the number of hogs and pigs in the three counties between 1980 and 1987. Chief crops in the region include

sorghum, corn, soybeans, cotton, and wheat. In Alabama, DeKalb County ranks second in corn production and number one in hog production. It is also number two in broiler production.

The major forest type in the three-county area is upland hardwood--mostly oaks and hickories mixed with pine. "High grading" and other cutting practices have already removed the highest quality species such as black cherry, black walnut, and yellow poplar from area. Many of the remaining scattered stands of upland hardwoods intermingled with pine are economically noncommercial because of topography, stand densities, and poor accessibility.

In 1985, the sale of sawtimber and pulpwood at first processing point from DeKalb, Cherokee and Etowah Counties provided \$7,991,000 or 7.3 percent of the State's total. Contributing to this total was 11,117 (thousand board feet) of pine sawtimber; 2,365 (thousand board feet) of hardwood sawtimber, 124,382 (cords) of pine pulpwood, and 43,826 (cords) of hardwood pulpwood.

The manufacturing industry is increasing in importance in two of the three counties. During 1987, 30.7 percent of the DeKalb County work force, 6.9 percent of the Cherokee work force, and 37.6 percent of the Etowah County work force were involved in manufacturing. During 1988, military outerwear was a major manufactured product of Cherokee County. Knit shirts, snack cakes, children's clothing, prefabricated houses, steel joist trusses, and hosiery in DeKalb County and automobile tires, children's outerwear, rolled steel sheets, and carbon steel plates and in Etowah County were the major manufactured products along with poultry processing in both counties.

The number of coal mining employees in the three-county area has steadily declined since 1978. In 1978, Cherokee had 85; DeKalb, 260 and Etowah 38. By 1988 all three counties had no coal mining employees (Economic Abstract of Alabama, 1989). Notwithstanding, there were reported 5,045 net tons strip mined in DeKalb County in FY 1988.

Cherokee and DeKalb Counties are classed as rural counties. Etowah is classed as a metropolitan county (50,000 population or more, by census definition) Alabama SCORP, 1986.

Increased utilization of the recreation potential of the study area is indicated by the number of new recreational developments that have been built recently or are presently under construction.

The Research and Statistics Division, Department of Industrial Relations, State of Alabama, lists for March of 1985 the following "Basic Labor Market Information."

<u>County</u>	<u>Civilian Work force</u>	<u>Total Employment*</u>	<u>Unemployment Rate**</u>
Cherokee	8,220	6,580	20.0
DeKalb	27,110	23,720	12.5
Etowah	41,730	36,790	11.8

* Place of residence basis

**Rate computed on unrounded data

Regional Recreation Opportunities

For the purpose of assessing outdoor recreation opportunity, the region is defined as that area within a 100-mile radius of the intersection of Little River and Alabama State Highway 35. To the south about 50 miles, is the Talladega National Forest. Oak Mountain State Park to the south of Birmingham and Rickwood Caverns north of Birmingham are about 75 to 100 miles southwest of the study area. Westward from the Little River are the William B. Bankhead National Forest, 100 miles; Lake Gunterville State Park, 35 miles; Buck's Pocket State Park, 25 miles; and Cathedral Caverns State Park, 40 miles. To the northwest are Monte Sano State Park, 60 miles and Joe Wheeler State Park, 100 miles. Russell Cave National Monument is located approximately 40 miles to the north.

Northeast of the Little River are Chickamauga and Chattanooga National Military Park, 40 miles; and Booker T. Washington and Harrison Bay State Parks, 60 miles. The point of famed Lookout Mountain at Chattanooga, Tennessee, located 40 miles north, is well known for its spectacular scenic views. To the east and southeast in Georgia are found Lake Allatoona, 60 miles; Lake Sidney Lanier, 90 miles; and West Point Lake, 90 miles. The State parks, national forests, wildlife management area, and National Park System areas provide a great diversity of outdoor recreational opportunity. Reservoirs in the Tennessee River basin north and west of the Little River are part of the Tennessee Valley Authority system. Those to the east and southeast in Georgia are part of the Corps of Engineers system.

Transportation

Interstate 59, the major north-south highway between Chattanooga, Tennessee and Birmingham, Alabama, parallels the study area. The interstate and related major highways provide easy access to the area from cities in Tennessee, Georgia, and Alabama as well as Mississippi, Arkansas and the Carolinas. State Routes 68, 117, 176 (the Lookout Mountain Parkway) 273, and 35 serve the study area. Federal Highways 11 and 411 also provide access to the area.

Gadsden, Anniston, Fort Payne, Alabama and Rome, Georgia are all within an hour's drive from the area. The Lookout Mountain Parkway traverses the area linking Chattanooga, Tennessee with Noccalula Falls Park at Gadsden, Alabama.

Climate

The climate is described as mild, having four distinct seasons with an average temperature of 60 degrees Fahrenheit. Average annual rainfall for the Little River region is approximately 54 inches. January is the wettest month (6.7 inches) with more than twice as much rain as October--the driest. Snowfall averages about 3 inches per year.

NATURAL AND RECREATIONAL RESOURCES

The widely attractive Little River Canyon is one of the deepest gorges east of the Rocky Mountains. It is sometimes called the Grand Canyon of the South. As a long time tourist attraction, the Alabama State Park system developed a tour road on the west side of the canyon rim and installed picnic facilities for the many visitors to the area.

The Little River Canyon and environs is the most extensive canyon system of the Cumberland Plateau. The area contains select examples of both unique and typical plant community types where outcrops of sandstone support prime examples of successional communities from shallow vernal pools to shrub zones along the periphery. The area excels in terms of biologic and geological features and recreational opportunity. The biological diversity of the area is currently prized and utilized by the scientific community. The scenic vistas afforded the recreating public are unsurpassed in the region.

The study area is located in Cherokee, Dekalb and Etowah Counties of northeastern Alabama. The major resource area documented includes the Little River Canyon, Yellow Creek Falls, and adjacent Cherokee Rock Village area.

The areas are located atop Lookout Mountain, a portion of the Cumberland Plateau Section of the Appalachian Mountains Division. Lookout Mountain is a northeast to southwest oriented ridge. Little River rises and flows along the top of Lookout Mountain until it reaches into the Ridge and Valley Province near Little River Community.

Pottsville sandstone and Pottsville conglomerate are the primary rocks underlying the river. Occasional strata of carboniferous and ferruginous shales outcrop within the canyon. Numerous strip mines (for the carboniferous shale, i.e., coal) exist along the upper reaches of the river outside of the study boundary. No outcrops of limestone (common within the Cumberland Plateau Section) have been observed within the canyon. Soils are shallow and are primarily alluvial and colluvial. Deeper accumulations are on gently rolling slopes above the canyon and terraces along the river. Soil pH approximates 4.5 to 5. Texturally, the soil is sandy with silts, clays and organics present along terraces.

The river rises at about 1,900 feet elevation and drops to approximately 650 feet along a 27-mile stretch to the mouth at Weiss Lake. The river falls about 46 feet per mile. The river is fed by numerous tributaries, all originating upon Lookout Mountain. During dry spells, tributaries cease to flow but pool zones remain along the river. During periods of high rainfall, the river becomes a raging torrent. This is evident from debris commonly found in trees 15 feet or more above the normal level of the river.

From its origin, outside the principal study area, the river occupies a relatively broader valley only occasionally undercutting the surrounding sandstone. As the river grows, it downcuts further forming submaturely dissected canyons. The stream bottom is sandy with some rocks exposed. Where the stream pours over the edge of rock strata, riffles occur with flat rocks along the bottom interspersed with boulders. Pool zones are interrupted by riffles again where the rocks are scoured by the stream. Canyons become much deeper near DeSoto State Park but canyon areas are discontinuous providing easier access to the river from high ground.

The nature of the stream changes dramatically just below the junction of Alabama State Highway 35 by abruptly dropping 45 feet to form Little River Falls. At this point, the gorge begins with access primarily restricted to tributaries which mostly rise along the northwestern side of the canyon. The gorge is characterized by having shoulders with expanses of sandstone

outcropping, steep bluffs, rocky talus, and a bouldery stream bottom. The stream is swift and turbulent with many small falls and hydraulics until it reaches the Ridge and Valley Province at the Little River Canyon Mouth Park.

The Cherokee Rock Village is located to the south of the Little River Canyon. Physiographically, it is identical to the plateau surrounding the Little River Canyon and provides an interesting comparison as a plateau not incised by a dominant hydraulic action. The brow of the mountain provides spectacular scenic vistas over Weiss Lake while the surrounding mountain provides excellent opportunities for hiking, camping and related recreational activities. The area is punctuated by the Cherokee Rock Village, a spectacular and unique, deeply incised sandstone area extensively utilized by rock climbers, hikers and other trail users.

Specific Areas of Special Concern

DeSoto Falls at the northern end of study area plunges about 100 feet into a spectacular, sandstone gulf. The river has undercut the southeastern side to produce an impressive cliff with grottoes at the base. Sandstone shoulders occur around the falls. The northwestern side of the pool is bordered by a bouldery talus which extends up to the rim of the gulf. Much of the area, is currently managed as a part of DeSoto State Park. A dam, outside the study boundary, impounds the river just above the falls. A picnic area and rest rooms are located adjacent to the dam. A cement walkway and steps connect the parking area with the shoulder overlooking the falls. Trees have been topped or removed from the talus and canyon shoulder to provide an unobstructed view of the falls from the homes perched on the rim. Only the bluff is left generally intact; however, several cottages can be easily seen through the woods.

DeSoto State Park area, south of the falls (approximately 5,000 acres) contains a small portion of the canyon. Canyon shoulders are mostly wooded with some outcropping occurring. A large outcrop is present within the campground. Trails into the canyon are present. The canyon is narrow within the park, and just below the park the valley widens to provide access to the river.

Little River Canyon, south of the park, is extremely impressive with some depths approaching 700 feet. The canyon has been altered little by man. Entry to the canyon is restricted by bluffs which can only be partially avoided by hiking (climbing) down tributary canyons. Some of these have impressive wet-weather falls.

The Little River drainage is a biologically fascinating area. Erosion has created a variety of rock expanses, benches, bluffs, taluses, rocky noses, and sandy terraces which provide a myriad of moisture regimes on a general theme of moderately acid soils. The basin has a distinct cool air drainage which tends to perch warmer air up near the canyon rim. The arenaceous soils provide a substrate much like the outer coastal plain. The admixture provides unusual habitats for some unusual species combinations ranging from mountain to coastal plain.

Vegetation of tablelands relate very well to substrate. Relatively deep, dry-mesic soils have mixed upland oak-hickory/heath communities. Shallower soils support *Pinus virginiana*/heath communities. Where expanses of outcrop occur, vegetation is restricted to crevices and "islands" of soil. Noteworthy inhabitants from Dr. R. David Whetstone's 1989 "Little River Canyon National Natural Landmark Site Evaluation" include:

1. Allium speculae (Ownbey's onion) which is restricted to Lookout Mountain and is under Federal review (Whetstone 1988a);
2. Bigelowia nuttallii (Golden-rod), at the southern end of the range;
3. Coreopsis pulchra (Boynton's tickseed) which is restricted to Lookout Mountain and a site in the nearby ridge and valley;
4. Cuscuta harperi (Harper's love vine), endemic to Lookout Mountain;
5. Diervilla rivularis (Bush-honeysuckle) is abundant on Lookout Mountain, but rare elsewhere (cf. Henifin 1981);
6. Schoenolirion wrightii (Sunny-bells) is known from one area east of the Mississippi River where it is disjunct from Arkansas and Texas populations (Nixon and Ward 1981, Sherman 1979);
7. Selaginella rupestris (Spike-moss), considered by Freeman, et al. (1979) to be S. riddellii; possibly endangered;
8. Sporobolus junceus (Michaux's Rush Grass) is primarily an inhabitant of the coastal plain but occurs in sandy soils of the outcrops;
9. Talinum mengesii (Quill flower), possibly endangered;

Vascular plants of rock bluffs include Asplenium montanum (Mountain spleenwort), Rhododendron catawbiense (Rosebay rhododendron; at the southern limit of its range), and Kalmia latifolia (Mountain laurel).

Rock chestnut oak/heath predominates on rocky talus leading down into the river. The cover values of heath (mostly Kalmia latifolia, Rhododendron arborescens, R. catawbiense, R. periclymenoides, and Vaccinium arboreum increase as soils become more mesic. Frequently, Acer leucoderme (Chalk maple), A. rubrum (Red maple), Betula lenta (Sweet birch), Fagus grandifolia (Beech), and Magnolia tripetala (Umbrella magnolia) are associates. Rocky noses of points have Pinus virginiana dominated communities.

Talus and terrace plants of interest include:

1. Commandra unbellata (Bastard toad-flax), considered a special concern species by Freeman, et. al. (1979);
2. Fothergilla major (Witch-alder), classified by Freeman, et. al. (1979) as a special concern species;
3. Nestronia umbellula, possibly threatened;
4. Sarracenia oreophila (Green pitcher-plant) federally listed as endangered, Cook 1979, which also occurs on canyon shoulders;
5. Pyrolaria pubera (Buffalo-nut) very near the southern limit of its distribution and considered a species of special concern by Freeman, et. al. (1979);

6. Rudbeckia heliopsidis (Black-eyed Susan) is considered a special concern species by Freeman, et. al. (1979); and

7. Stewartia ovata (Mountain-camellia), reported by Elias (1980) as rare and perhaps deserving protection and listed as a species of special concern by Freeman, et. al. (1979).

Plants bordering the streamside most frequently are Alnus serrulata (alder), Ilex decidua (Possum-haw), I. verticillata (holly), Lyonia ligustrina (Male-berry), Rhododendron arborescens (Azalea), R. alabamense (Azalea), and Kalmia latifolia (Mountain laurel).

Additional rarities that occur within this myriad of habitats are Cypripedium acaule (Pink lady slipper orchid) which occurs in large populations in dry mesic woods is considered threatened and Trichomanes boschianum (Appalachian bristle fern), possibly a threatened species is epipetric in grottoes, under wet overhangs, and shallow caves (Lellinger 1985).

Riffles and shoals harbor a number of species of special interest. Schoenolirion wrightii (Sunny-bells) is a rock crevice plant of frequent occurrence. Lindernia saxicola (Rock pimperl), considered extinct until reported from Little River recently, demonstrates a new aspect of the biology in the Little River drainage. This species is apparently the same as the more common Lindernia monticola which occupies a drier habitat. Ptilimnium fluviatile (Water bishop weed), a species under Federal review, is of common occurrence on rocks within the riffle zone. An aquatic, Sagittaria secundifolia Kral (Kral's water-plantain) has been added to the Federal list. Sagittaria secundifolia is known only from Little River and tributaries (Whetstone 1988b).

A large pile of sand is present at the mouth of Little River. A small, but singular plant community of Quercus margaretta (Dwarf post oak) - Q. incana (Blue-jack oak)/Vaccinium arboreum (Tree sparkly berry) occupies the area. This assemblage is commonly found on well-washed sands of the outer coastal plain so this is a unique assemblage for the Cumberland Plateau.

Animal species that are rare or have noteworthy status also occur. Fish taxa are:

1. Notropis caeruleus (Jordan) (Blue shiner), listed as species of special concern (1976); and
2. Percina lenticula Richards and Knapp (Freckled darter), listed as possibly threatened (1976).

Amphibians and reptiles reported from the vicinity (not necessarily specifically from Little River drainage) include:

1. Desmognathus ochrophaeus Cope (Mountain dusky salamander), reported from Lookout Mountain and considered a species of special concern (1976); and
2. Lampropeltis trianqulum trianqulum (Lacepede) (Eastern milk snake), is common in the northeast but reaches the southernmost limit on Lookout Mountain where, according to Mount (1976), the species is of special concern.

Further, Robert Mount, (1975) gives the Appalachian plateaus of Alabama as being the southern limits of Aneides aeneus (Cope and Packard) (Green salamander) which is known to occur in Little River Canyon.

Water Quality

The water quality of Little River is exceptionally good. It is classified by the Alabama Department of Environmental Management for public water supply, water contact sports, and fish and wildlife. Most of the drainage area of the river is in timber, consequently the water stays clear most of the time. Under normal conditions, or when the water is low, fish can be seen swimming in the pools that are a part of the system. Low levels of coliform are present and may be attributable to surface water runoff. The DeKalb County Health Department is monitoring the stream and taking action where warranted.

Environmental Indicators: Caddisflies

Kenneth Stuart Frazer, in his thesis entitled "Caddisflies (Trichoptera) of the Little River Drainage in Northeastern Alabama," related that a total of five new species of caddisflies were discovered. He records through a personal communication with S. C. Harris, Geological Survey of Alabama, that approximately 50 species of caddisflies were collected in the summers of 1979, 1981, and 1987. Of these, two were new to science and two others had a distribution limited to the Little River drainage. Frazer states that, "their prevalence and abundance in aquatic systems makes them ideal for use as environmental indicators" and further states that, "The presence or absence of some species may shed light upon water quality of the aquatic environment in question (Roback 1972)."

Rate of Flow

The Blue Pond gauging station is located at the Tennessee, Alabama, and Georgia railroad bridge crossing of the Little River. The drainage area covered by this station is approximately 199 square miles. Records examined for this station cover the period March 1982 through October 1990. During this period the maximum average flow occurred during the month of February 1990 with a rate of 27,100 cubic feet per second. The minimum flow, in November 1987 was computed at 0.65 cubic feet per second. Flow data by months was taken for the years 1982 through 1990 for the main recreation months.

**LITTLE RIVER FLOW RATES FOR SELECTED MONTHS
BLUE POND GAUGING STATION (1982-1990)**

<u>Year</u>	<u>March</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>
1990	1928.00	71.9	9.74	5.48	2.89	7.73
1989	1021.00	1101.00	418.00	72.6	306.00	607.00
1988	234.00	4.53	15.8	27.9	515.00	47.7
1987	1258.99	137.00	38.4	8.5	3.70	1.35
1986	402.00	7.66	5.52	19.4	49.9	274.00
1985	275.00	16.3	1690.00	564.00	34.0	122.00
1984	762.00	33.3	383.00	578.00	2.27	28.9
1983	926.00	123.00	35.7	4.57	481.00	9.88
1982	820.00	23.0	27.4	62.7	12.7	15.6

The table indicates the highly variable flow rates for Little River. The spring months are high water months and some floating begins on the river. There usually is adequate water for recreation through the first half of July. During the last half of July, all of August, and early September, the amount of water may be limited. At some times there may be no flow and available water would be limited to the deep pools. This is not altogether bad since walking up the canyon can be aided by using part of the river bed and stepping from rock to rock.

Fisheries

Gary H. Moody, Chief, Wildlife Section, Department of Conservation and Natural Resources, State of Alabama, in a personal communication stated on March 18, 1991:

"The aquatic habitat above Highway 35 falls is characterized by long sluggish pools interspersed with short series of rapids. Below the falls, in the canyon, flows intensify in the short, relatively shallow pools. Rapids become longer, steeper, and flows increase in velocity. Aquatic vegetation is generally restricted to sparse stands of water willow both above and below the falls. Beds of water willow below the falls tend to be less dense and more restricted. The water is generally clear and of high quality. Flows vary drastically between rainfall events. The period of lowest flows occurs during mid-summer.

The fish population of Little River is diverse and relatively unexploited. Redeye bass is the dominant bass species. However, Alabama spotted bass and largemouth bass are also present. Sunfish are represented by redbreast, bluegill, longear, and green sunfish. Warmouth and northern rock bass are also present. Several species of shiners, chubs, and darters have been collected. The fish population, near the confluence of Little River and Weiss Reservoir, is influenced by species more common in the impoundment.

Access to the stream is restricted. The surrounding terrain is rugged and limits walk-in fishermen, even above the falls. Float fishing is restricted to the river above the falls. Even there put-in and take-out points are limited."

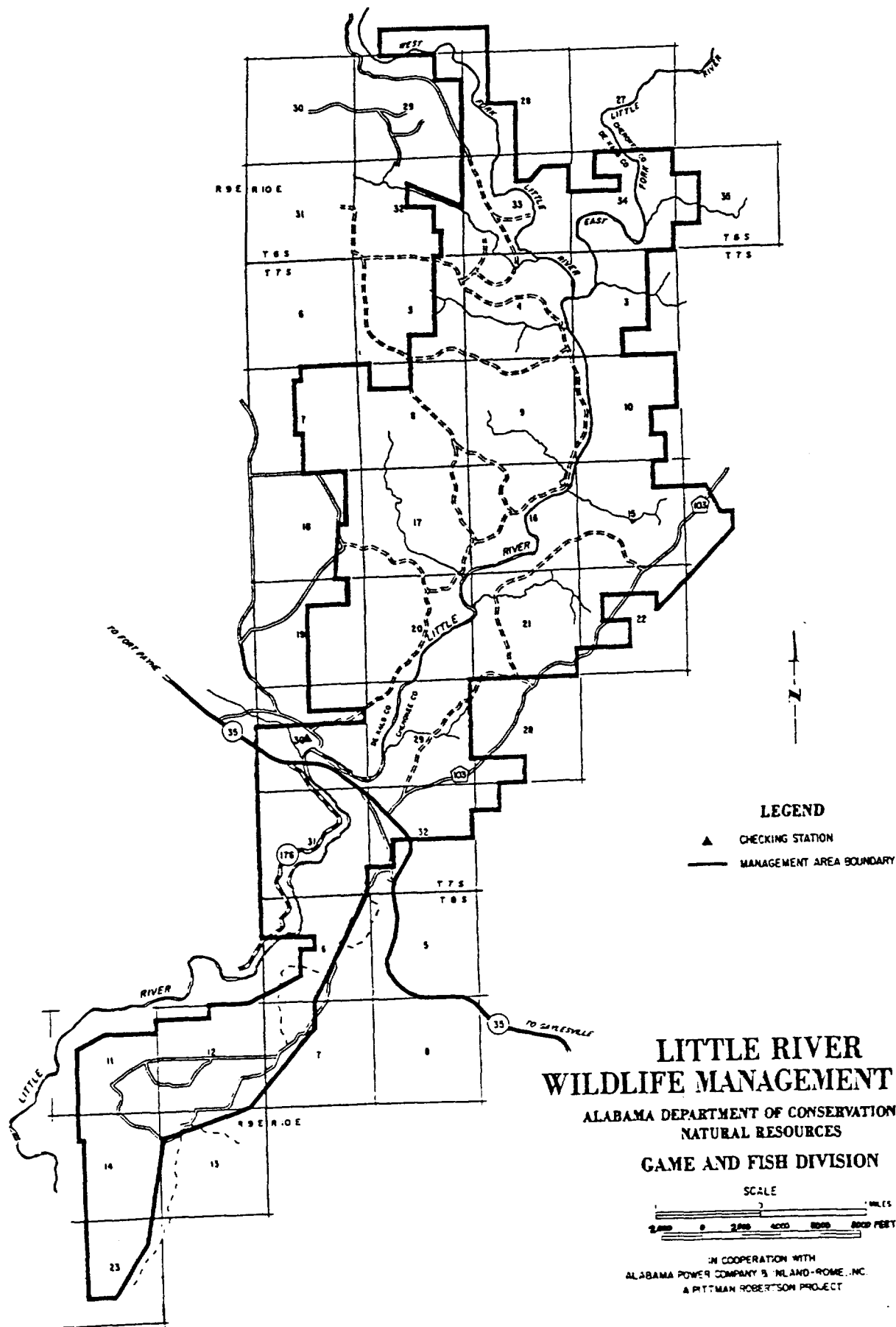
Little River Wildlife Management Area

William A. Coggins, Supervising Wildlife Biologist with the Game and Fish Division of the Department of Conservation and Natural Resources, offered a comprehensive analysis of the Little River Wildlife Management Area. A portion of his comments follow:

The Little River Wildlife Management Area consists of approximately 18,000 acres of land atop Lookout Mountain in Cherokee and DeKalb Counties in northeast Alabama. The topography varies from flat to rolling on the mountaintop, to rough on the mountainsides.

The management area derives its name for the Little River, which meanders through a portion of the area. In addition to the river, there are several small spring-fed streams across the remainder of the management area.

The Little River Management Area was established in 1967 and has been managed as a public hunting area since its creation by the Alabama Department of Conservation and Natural Resources, Game and Fish Division. Cooperative agreements between the landowners and the Department have granted the Department, through its Wildlife Section, the right to develop and practice resource management activities that benefit wildlife as fully as practical in coordination with the landowner's own land-use objectives. The major landowners presently involved with the Department in these cooperative agreements are Alabama Power Company, Inland-Rome, Inc., and the Alabama State Parks.



LEGEND

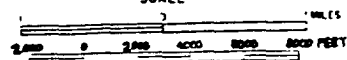
- ▲ CHECKING STATION
- MANAGEMENT AREA BOUNDARY

LITTLE RIVER WILDLIFE MANAGEMENT AREA

ALABAMA DEPARTMENT OF CONSERVATION AND
NATURAL RESOURCES

GAME AND FISH DIVISION

SCALE



IN COOPERATION WITH
ALABAMA POWER COMPANY'S INLAND-ROWE, INC.
A PITTMAN ROBERTSON PROJECT

Land-use objectives of the cooperating landowners have resulted in a varied mixture of vegetative communities on the management area. Portions of the area are under intensive timber reproduction and harvest practices, with resulting clearcuts and predominate pine stands. Less intensive timber management has produced pine-hardwood mixtures, and portions of the area have plant species that are dominant in the oak-hickory climax vegetation typical of this region. There are several herbaceous and shrub plant species of interest on the management area, including two small patches of a rare and endangered Green Pitcher Plant. Azaleas, mountain laurel, the Pink Lady-Slipper, and Indian Paintbrush are also found here.

Planned project activities are conducted annually on the management area for the benefit of wildlife and to provide hunting opportunities for the user public. These activities include the maintenance and planting of wildlife openings for wildlife, the maintenance of access roads, the maintenance of area boundary lines, and the establishment and management of hunting seasons.

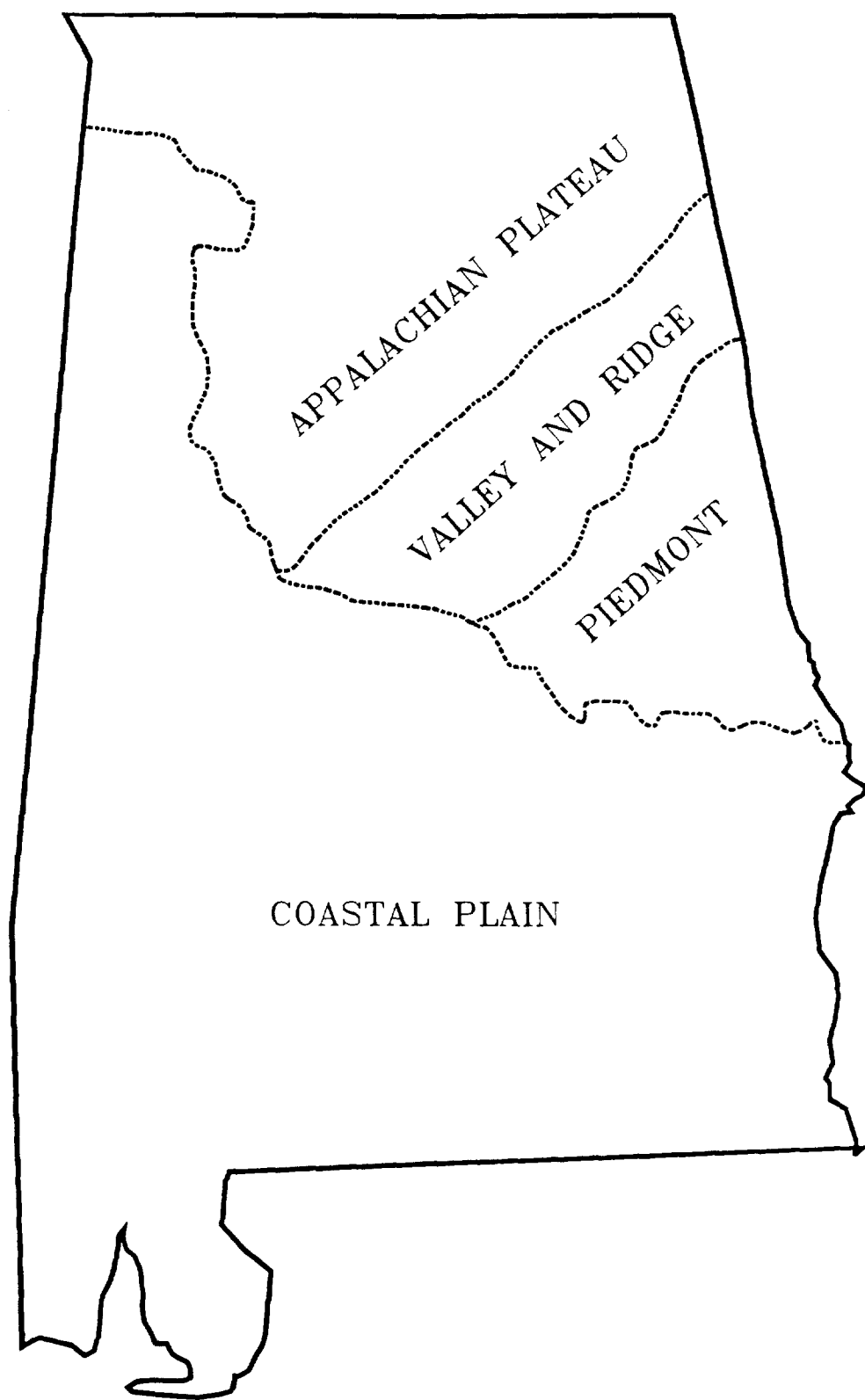
Initial efforts were begun in 1967 to establish wildlife openings for permanent maintenance and for the planting of wildlife food plant species. These efforts have continued until there are approximately 70 acres of these openings. These openings vary from one-fourth to two acres in size. Several of these openings have been sowed to perennial grasses and clovers for nesting and broodrearing. Other plots are planted annually to either millet, wheat, rye, ryegrass, Crimson clover, or Chufas. Several borders of Lespedeza bicolor, a shrub lespedeza, have been established for bobwhite quail. The predominant soil types on the area are loams and sandy loams, and these soil types react favorably to farming operations of the type used in the management program.

Approximately 45 miles of roads are maintained on the management area annually. These dirt-and-gravel roads provide access for area users and for personnel involved in area operations.

Annual maintenance of management area boundaries involves the painting of lines and posting of signs on approximately 45 miles of boundary. An additional 35 miles of roads are posted with area signs at appropriate intervals.

The Little River Management Area provides hunting opportunities to the public for both large and small game. The majority of hunter-users come from surrounding northeast Alabama, with occasional hunters from other parts of Alabama or from out-of-state. The area provides an average of approximately 6,000 man-days of whitetail deer hunting, and another 3,600 man-days of small-game and turkey hunting.

Scheduled deer hunting seasons include gun stalk, primitive weapons, and archery. Deer populations are good and the deer are in good physical condition with good average weights and antler development.



PHYSIOGRAPHIC PROVINCES OF ALABAMA

For the most part, the small-game hunting is under-utilized, and small-game populations could withstand greater hunting pressure than is now being experienced. Wild turkeys were stocked on the area in 1968. The first hunting season was opened in the spring of 1975. Turkeys have responded favorably to ongoing management activities, and there is a resulting good turkey population.

The management area now provides a full spring turkey hunting season, with a harvest of approximately 45 to 50 gobblers annually. The spring turkey season draws hunters from as far away as Pennsylvania.

A permit is required for all hunting on the management area. These permits are provided free-of-charge by the Department. Daily permits are required for the gun-deer and primitive weapons deer hunts, while a season permit is provided for archery deer, turkey, and small-game hunting. Season permits are available from designated issuing agents while the gun-deer and primitive weapons daily permits are issued from the area checking station on the days of the hunts. The checking station is located on Alabama Highway 35, adjacent to the bridge across Little River at the extreme upper end of Little River Canyon. A primitive camping area site is located at the check station area.

Along with the proper permit, a current state or respective county hunting license is also required. In addition, a management area license is required for all deer and turkey hunting.

The Little River Wildlife Management Area provides almost 10,000 man-days of hunting annually, and many of the hunter-users have no access to hunting opportunities other than that found on the management area. In addition to hunting, the natural beauty of the area and Canyon, the clean river and the waterfalls, all combine to attract other area users who spend many thousands of man-days each year in birdwatching, hiking, photography, fishing, swimming, or just plain "getting out".

Many of the current management practices on State lands, such as timber harvesting, hunting, and planting of food plots for wildlife enhancement, are not consistent with National Park Service management policies. Hunting and trapping are allowed only in National Park Service areas where such uses are specifically authorized.

The study team recommends that hunting be recognized to the maximum extent possible, consistent with the size of the area, safety of the visitor, and designation of the area. Seasons, limits, permits, weapons, and other details would be established through consultation with the Alabama Department of Conservation and Natural Resources. The National Park Service management policies direct that managers protect the integrity of natural ecosystems even in areas set aside with legal authorization for hunting (1988 National Park Service Management Policies 4:7).

Geology

The State of Alabama has been described as embracing parts of four geologic provinces--the Appalachian Plateaus, the Coastal Plain, the Ridge and Valley, and the Piedmont.

The study area falls within two: the Appalachian Plateaus and the Ridge and Valley.

Mountain ridges and longitudinal valleys trending in a northeast-southwest direction characterize the Ridge and Valley Province. It is within the Ridge and Valley Province that stratified rocks, generally highly inclined, are found. The valley structure results from the folding and faulting of the Paleozoic (meaning ancient life) rocks. In contrast, the Appalachian Plateau, which constitutes the bulk of the study area, exhibits only minor deformation. The strata are for the most part, nearly horizontal.

In this area of the State, the plateau section has an elevation of about 1,700 feet above sea level. The valley areas have an elevation of about 550 feet above sea level.

Adams (1926) described, "The rocks of the Appalachian Plateau consist of limestone, sandstone, and shale as in the Appalachian Valley, but unlike the rocks of the valley they are in most of the plateau areas but slightly deformed from their original horizontal attitude." Along the margins of Lookout Mountain, however, some of the strata are sharply upturned to steeply inclined.

When structure sections are viewed on the geologic map, the anticlinal strips (strata bending upward) were originally the highest but have eroded to form the valley areas. The synclinal areas, in which the strata bend downward, are now the higher mountainous area because those areas have been protected from erosion by their protecting cover of resistant sandstone.

Timber - Trees and Woody Shrubs

The most striking characteristic of the vegetation in the Little River study area is its diversity. The rich botany of the Little River region results from the variety of sites within the gorges ranging from extremely dry to moist. Within the valleys are found not only typical flora, but also plants usually restricted to other geographical locations. Streambank corridors are 90 percent forested with upland hardwood stands intermixed with pine. With reference to its vegetation, Lookout Mountain topography consists mainly of table plateaus with north and south facing slopes, lower slopes, terraces, and streambottoms.

The plateau is classed at 0 to 40 percent slope. The soils are well drained with low fertility. On rocky outcrops, the soil depth is shallow which allows wind throw of timber in some areas. The primary vegetation consists of white oak, Southern red oak, scarlet oak, post oak, chestnut oak, black oak, hickories and blackgum. The understory consists of dogwood, sassafras, sourwood, huckleberries, and cedar. For harvesting purposes, the most desirable species consist of the pines and oaks.

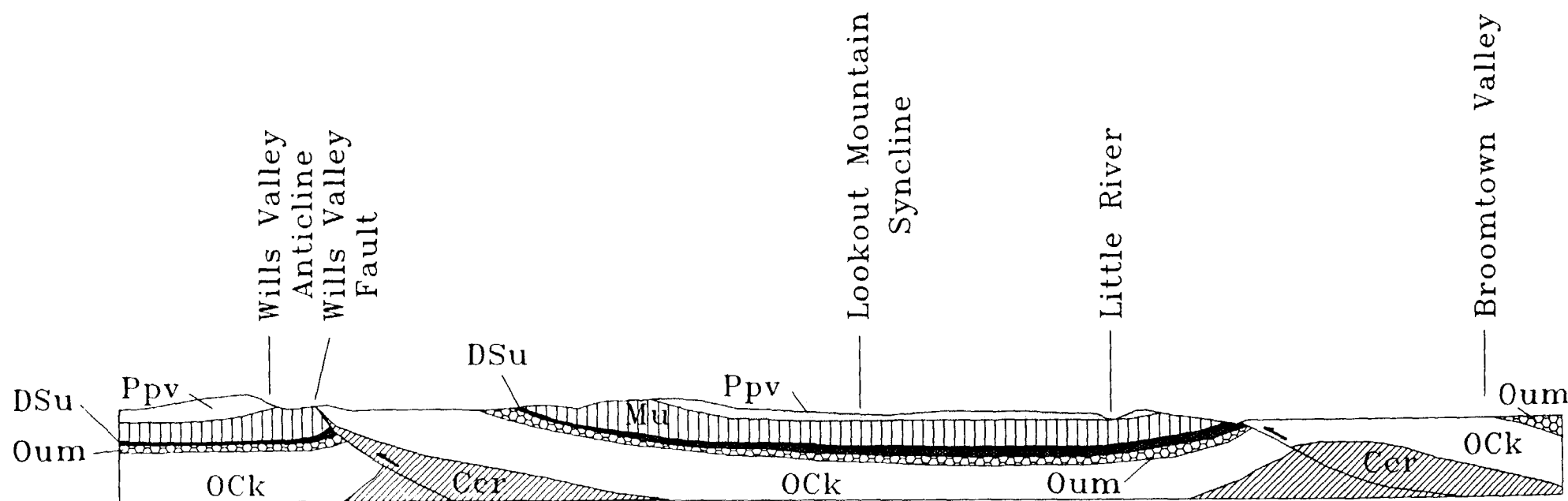
The northern slopes are classed at 6 to 60 percent with well drained soils. White oak, northern red oak, post oak, hickory, loblolly, Virginia, shortleaf pine, yellow poplar, and American beech are to be found on these slopes. The understory is of dogwood, persimmon, and magnolia.

The south slopes basically are the same as the northern slopes except the quantity of northern red oak diminishes with possibly a little increase in sassafras.

The lower slopes, terraces and stream bottoms have deep well drained soils. The primary species found are yellow poplar, loblolly pine, American sycamore, white oak, and white ash. The understory consists mainly of red maple, blackgum, sourwood, American beech and holly.

KEY

- Ppv** - POTTSVILLE FORMATION
- Mu** - MISSISSIPPIAN SYSTEM UNDIFFERENTIATED
[locally includes Pennsylvanian-Mississippian Parkwood Formation]
- DSu** - CHATTANOOGA SHALE AND DEVONIAN-SILURIAN SYSTEMS UNDIFFERENTIATED
- Oum** - UPPER AND MIDDLE ORDOVICIAN SERIES UNDIFFERENTIATED
- OCk** - KNOX GROUP UNDIFFERENTIATED
- Cer** - CONASAUGA AND ROME FORMATIONS UNDIFFERENTIATED



LOOKOUT MOUNTAIN CROSS SECTION

Because the canyon has been relatively inaccessible to logging, an occasional relic of the original forest is found towering over a scattered stand of second growth trees. While most of the study area has been logged, it is returning to a natural state. There are pure stands of pine together with pure stands of hardwoods as well as mixed pine - hardwoods. Natural succession can be observed in places as the hardwoods replace the pines.

In the DeSoto State Park one can see Virginia, loblolly, shortleaf and longleaf pines side by side. The second largest Virginia pine in the State stands behind the park's country store. Some of the pines and hardwoods in the park are over 100 feet tall with diameters of over 20 inches. One yellow poplar measures 38 inches in diameter. There are probably others to be found measuring even greater diameters.

There is an abundance of flowers in bloom throughout a long season (including several species of azaleas, rhododendrons, and mountain laurel). Sweet shrub with its interesting maroon flowers is abundant in the rich woods where the ground is covered with partridge berry, ferns, and an ever-changing array of wild flowers. Royal ferns line the streambanks and yucca can be found growing on talus slopes. Brilliant color changes occur in the forest as fall approaches bringing with it a flurry of visitation to the area.

CULTURAL RESOURCES

The Little River Canyon and Cherokee Rock Village area are integrally related to the prehistory and the history of the three counties in which they are located. The relationship of the river, mountain and canyon complex to the surrounding area cannot be separated. Sufficient cultural resources exist within the study area to adequately provide the foundation for interpretation of the larger area's thematic stories. As a proposed recreational area, it is suggested that important thematic stories found in the study area can and should be presented within the larger county context as a positive opportunity to forge strong park/community partnerships for future tourism and economic growth. In this context, the history of the study area and the larger county area are presented as an integrated whole.

A listing of the cultural and natural themes is found elsewhere in this paper.

Prehistoric Cultures

Early man, or prehistoric man inhabited the study area. Archeological evidence dating back to approximately 12,000 BC is found scattered over the eastern United States, including Cherokee County. Known as Paleo Indians, they hunted big game and supplemented their diet with various edible plants.

A new culture appeared about 8,000 BC and lasted until 600 BC. These people, known as the Archaic people were hunters and gathers but utilized a wider range of environments than their predecessors, the Paleo people. Archaic sites, recognizable by notched and stemmed projectile points, are found throughout the general study area.

From about 300 BC to 1,000 AD the Woodland culture appeared. It was marked with ceramics, the bow and arrow, and the burying of their dead in low mounds.

The Mississippian culture developed about 1,000 AD and existed until the early historic period of 1600. Holstein, Hill, and Ruffin-Bass report, "Mississippian cultures are believed to have subsisted by intensive horticulture supplemented by hunting and gathering." They reported that, "The fertile floodplains of the streams and rivers of the Ridge and Valley Physiographic Province undoubtedly attracted Mississippian groups." They reported that Mississippian sites are frequently encountered in portions of northeast Alabama.

Because the area around the envisioned park contains sites from every cultural period known in Northern Alabama, the research potential is high. A significant amount of work has been conducted in the area (168 recorded sites) but the park area remains virtually unsurveyed for archeological and historic sites.

Due to the ruggedness of the Little River Canyon and the difficulty of access to many areas, cultural resources may have received little human impact.

Several factors allowed human access to the region and an allowed infusion of outside influences. The Tennessee River provided access from the north, the Coosa River provided access from the south and the east, and the Warrior River provided access from the southwest. Also, the Ridge and Valley corridor provided access to the area from the northeast and the southwest. During various time periods, the Little River Canyon area was influenced by cultures from the Gulf Coast of Mississippi, from the Coosa River area to the south, from western Georgia via the Coosa River, from the Gunterville Basin, and north Georgia via the

Tennessee River. Sites such as Russell Cave were occupied from at least the Transitional Paleo-Indian/Archaic Period. This indicates that humans were probably in the Little River Canyon area very early.

The most interesting and important questions to be answered archeologically in the Little River Canyon are:

1. What external cultures affected the Little River Canyon area?
2. To what degree were these external cultures present (i.e. did they replace the Little River cultures or modify them)?
3. What are the implications of this external cultural contact (i.e. did they cause conflicts as perhaps evidenced by the stone structures found in the area)?
4. Is there evidence of increased political control and evidence of social ranking?

The earliest known sites in the envisioned park are the caves at DeSoto Falls. Both of these have a Middle Archaic component dating to 6,000 to 8,000 B.P. A survey of bluffshelters in the canyon would probably produce Early Archaic and possibly Paleo sites. Early Archaic sites have been recovered from the area.

The above two sites also have a Late Archaic component together with a Middle to Late Woodland component. The final prehistoric occupation is Mississippian. These two caves were used during almost every cultural phase. This is a good indicator that a bluffshelter survey of the canyon might produce the entire cultural sequence.

A question that relates to bluffshelters is why did people choose to live in shelters during certain chronological periods and live elsewhere in others? The question could be answered by a comprehensive bluffshelter survey. Faunal and Floral remains from these bluffshelters might provide evidence of seasonal occupation.

One of the most important research questions that can be answered archeologically is the correlation between where people choose to live and the time period in which they lived. This would give a better understanding of the technology that was used and how it related to environmental living conditions.

The surveys that have been conducted in the area have focused around the waterways. A significant number of sites have been recovered, but they only reflect a portion of the picture of aboriginal life. Native Americans ideally would have lived in an environment that provided for their needs (plenty of water, well drained soils, and abundant food). These sites have been recovered during the river bottom surveys. However, events such as wars and food shortages may have forced people to move into marginal environments. For this reason, the uplands and the canyon of Little River need to be surveyed. Also, the absence of Paleo-Indian sites may not be a function of the absence of those people but a reflection of a biased surveying strategy.

Another important question that can be answered archeologically is how did population densities change over time. This will give an understanding of the environment and the carrying capacity of the park for human inhabitants.

In order to answer the archeological research questions, detailed surveys of all geographic and environmental zones will need to be conducted in and around the proposed park area. The surveys that have taken place along the rivers and at specific locations are too concentrated to provide understanding of the entire cultural sequence of the park.

The surveys should focus in two distinct regions--bottoms and uplands. The first, bottoms, consists of the river, the floodplain, the canyon walls, and the terrace.

The first and most important bottom survey that should be conducted is a detailed survey of all the bluffshelters in and around the Little River Canyon. This would help establish the chronological sequence for the majority of the envisioned park. Bluffshelters are also the most vulnerable to looting and vandalism.

The terraces above the canyon then should be surveyed. Open air sites and rock structures may be encountered. This would aid in the understanding of the relationship of the canyon and aboriginal life.

The last bottom survey would be the floodplain at the base of the canyon. If sites are contacted here, they would probably be of a temporary nature. The river should be checked for fish weirs, as many are found elsewhere to the south.

The upland region consists of the blufflines, ridges, valleys, and hollows. A survey of the valley areas associated with the park. This survey will aid in locating historic houses (both associated and non-associated with the TAG Rail Line). It would also identify open air aboriginal sites.

A survey of hollows in the upland region should follow. There is a possibility that bluffshelters, fish weirs and temporary sites may be encountered.

A blufflines survey of any ridges has a high probability that historic and prehistoric sites will be encountered in areas where the slope is less than ten degrees.

The final and least important survey to be conducted should focus on the ridges in the area. This would help identify aboriginal and historic sites located in less than optimal environments. This survey would give insight into the forces that caused people to live in these marginal environments.

Spanish Exploration and Contact

The history of Cherokee, Etowah, and DeKalb Counties begins with the ethnohistoric accounts of the ancestors of the Creeks and Cherokees first contacted by Spanish explorers in the 16th century. Three Spanish expeditions may have penetrated into the study area: Governor Don Hernando de Soto (1539-1541), Tristan de Luna (1559-1561), and Juan Pardo (1566-1568). The reconstruction of De Soto's route through Georgia and Alabama has long been debated and hypothetical routes presented. Most scholars place De Soto's army in the Coosa River Valley, at the juncture of the Little River and the Coosa River in Cherokee County, Alabama. Spain's missions along the Gulf and Atlantic coasts vied with France and England for colonial and commercial supremacy.

English Colonial Expansion

The English trader's influence on historic Creek and Cherokee nations expanded after 1680. Creek Indians fled from Euro-American confrontations and formed new towns along the Coosa and Tallapoosa Rivers. The Cherokees retreated into the Southern Appalachian Mountains.

Historic Creek and Cherokee Settlements

Ethnohistorical accounts provide a view of the aboriginal settlement pattern. In the latter part of the 18th century, the Cherokees were forced westward where they established new towns in the Lookout Mountain area.

Both the Creek and Cherokee settlement landscape underwent a metamorphosis during the late 18th and early 19th centuries. Agglomerated villages were transformed to a pattern of scattered farmsteads similar to the settlement pattern of the surrounding white frontier farmsteads. Major John Norton, a British Indian agent, travelled across Lookout Mountain to Will's Town in November 1809. Norton recorded the cultural changes taking place among the Cherokee people.

"Pleasant country of hill and dale, interspersed with hamlets and cultivated fields...Everything about these houses denotes more than ordinary industry and neatness. Many of the women were busily employed in spinning cotton...." He added,

"...they have extended and improved their agriculture, increased their cattle, and applied to trade. It is now very common for a man to possess a hundred head of horned cattle, and as many hogs. The women are extremely industrious, have always abundance of victuals cooked in their houses, and make cloth not only sufficient in quantity for their own families, but sell great quantities of it to the Creeks of Muscogui in exchange for cattle. They feel their independence, and are anxious to improve their government, they enact laws which new exigencies demands; and, in every respect seem to be on the road of becoming one day an enlightened and civilized nation."

With acculturation came intermarriage with whites, the adoption of slavery, and Euro-American material culture and technology. These cultural changes were encouraged by Thomas Jefferson's policies when he set out to "accelerate civilization" among the Cherokees while at the same time attempting to convince the southern Indians to move west of the Mississippi. He ordered Indian agents, Return J. Meigs and Benjamin Hawkins, to furnish the Indians with agricultural implements and household utensils. The services of wheelwrights, carpenters, and other artisans were made available to the Cherokee Nation.

Andrew Jackson's defeat of the Creek uprising in 1814 resulted in the forced cession of lands west of the Coosa River. Alabamians and Georgians were insisting on Federal Government removal of all Indians. After the 1838-1839 Cherokee Removal, only a few Cherokees were left in Alabama.

The census records indicate that many Cherokee family names were Anglo Saxon, reflecting the history of interaction between the white tradesmen who resided in the Cherokee Nation. Descendants of these Cherokees were usually anxious to learn English, arithmetic, and the white man's way of living, including the development of plantation slavery.

Historic Cherokee Period Cultural Resources

There is a high probability that Cherokee-related historic structures and archeological sites may exist along the Little River.

The most well known historic site related to Cherokee Removal is known as Fort Payne. According to local history, a structure known as the "fort" stood at the site between Third and Fifth Streets in Fort Payne as late as 1946. Structural remains at the site include foundation stones, a chimney and a well. It was near here, at Wills Old Town, that Sequoyah developed in 1821 the 86 character Cherokee alphabet. His efforts made Cherokee the only written Indian language in the United States.

The National Park Service recently produced a Trail of Tears Study which contains appropriate historical information about the Cherokee Removal. It should be noted that white settlers had encroached upon the Cherokee lands even before the Removal Era. As lands were legally acquired from the Creeks and Cherokees during the years 1820 to 1835, Alabama formed three counties Cherokee (1836), Dekalb (1836), and Etowah (created in 1866 from adjoining counties). Legal white settlement followed the official survey of Cherokee lands in 1839.

Pioneer Farmsteads and Settlement Patterns

Settlers may have occupied former Cherokee farmsteads located on the best alluvial soils. Some of these early farmsteads were located within the study area. The majority of the settlers cultivated small landholdings of 40 to 80 acres.

The settlement pattern of the northeast section of Alabama was characterized by small subsistence farms clustered at small crossroad communities. This pattern changed in the late 19th century when railroads and company towns were established in a linear settlement pattern following the rail lines. Generally, farmsteads were scattered, houses faced roads, and roads typically followed stream divides.

Roads crossed over Lookout Mountain from Big Wills Valley on the west to Broom Town and Shinbone Valleys on the east, but the main roads were in the valleys, connecting settlements and villages.

Early Architecture

The earliest houses were log house types. The traditional house type associated with the yeoman farmers was the central hall or dogtrot.

The Daniel-Tucker home in the Little River community of Shinbone Valley (S.R. 273) is a one and a half story dogtrot log house. It is believed to be the oldest extant house in Cherokee County and served as the headquarters for Confederate General Hood in 1864. The house is found near Little River Canyon Mouth Park. The few Georgian and Greek Revival style houses in the valleys which date from the mid-19th century are indicative of plantation agriculture. Grist mills and sawmills were the local industrial sites associated with early communities.

Antebellum Iron Industry

Early settlers were probably among the first to discover and explore the Little River Canyon and surrounding area. Farming, herding, and hunting were later supplemented by labor at coal and iron ore mines on Lookout Mountain and at iron furnaces in the valleys. The first iron furnace was put in operation into 1852. The Alabama State Geologist reported the ore was of the red fossiliferous kind from a stratum of 10 to 24 inches.

Civil War Activities

Residents may have opposed secession and supported the Union during the Civil War, but they eventually served in the Confederate Army. In the fall of 1863 outlaw gangs of men made up of deserters from the Union and Confederate Armies were causing havoc among the citizens of small communities of north Alabama.

Streight's Raid through Cherokee County is considered by local historians to be one of the most dramatic episodes of the Civil War. A 67-mile local historic trail through the Coosa River Valley commemorates the actions of "Citizen-Soldier" John Wisdom who rode from Gadsden to Rome to warn citizens of the impending Union Raid. Confederate General Nathan B. Forrest pursued Streight and forced him to surrender 1,600 troops to his smaller force of 600 men on May 3, 1863, near Cedar Bluff. Later in 1863, elements of Union General Rosecrans' army prior to the battle of Chickamauga were sent across Lookout Mountain in an attempt to cut off Braxton Bragg's army from its supply lines to Atlanta.

Following the 1864 Atlanta Campaign, the study area was once again the scene of Civil War activities. After General W. T. Sherman claimed Atlanta, he skirmished with Hood's forces across the Little River. Sherman eventually arrived in Gaylesville on October 21, 1864, and reported he had about 60,000 men in the Little River-Gaylesville area. Sherman's forces withdrew from the Little River area on October 29, 1864. It was here that Sherman finalized his plans for a march through Georgia.

Reconstruction and Industrial Development

The post-Civil War period was a time of readaptation and change for northeastern Alabama. Improvements in transportation included the construction of a branch rail line to serve iron furnaces and mining operations. River transportation was improved by the Federal Government's design of a system of locks and dams for navigation on the upper Coosa River. Steamboats on the Coosa River and railroad expansion through the valleys were essential to the industrial development of the New South.

In 1872, Dekalb County's industrial potential was described in promotional literature.

"The mountains are full of coal and iron, and mines for the former are being opened."

County boosters also noted the significant natural and scenic resources of the county: DeSoto Falls, the caverns in the river bluff overlooking the falls, and the stone wall remains of what was believed to be an ancient Indian fortress.

Etowah County, formed in 1866, had not begun to exploit its vast coal and iron resources. In 1872, Etowah County's forest industry potential and access to railroads were promoted. "The mountains bristle with timber of large growth, and much lumber is exported."

The New South 1880-1930

Its mineral resources and other resources became known to members of the Union and Confederate Armies who passed through its valleys during the war. Before the turmoil of Reconstruction was over, Northerners, coming south and lowland Southerners, coming north, were meeting and mingling in the hill country for the purposes of railroad building, industrial development, and business speculation, including real estate speculation.

The Upland South, which included eastern Tennessee and northern Georgia and Alabama was one of the South's poorer areas at the turn of the century but by the mid-20th century had become the heart of the New South. Social historian and political scientist, H. C. Nixon believed this area was in a position to develop an economy balanced between agriculture and industry. After the Civil War, the region accepted Northern capital more readily than did the Lower South and underwent transformation with railroads, coal and iron mines, textile, lumber and steel mills, and a web of financial institutions tapped the energies of the "hill folk." Enclosed in the triangle of Atlanta, Birmingham, and Chattanooga (Nixon's "ABC country"), the Lower Piedmont became the New South. Nixon called it "the New South's Region of heavy industries and abundant labor."

Miscellaneous Industries

Small water powered grist and flour mills operated in all three counties. The Yellow Creek Mill near Sand Rock operated from 1880 to 1970. A water powered saw mill was located at Alpine in 1883. The forest industry shipped lumber to Chattanooga and cross ties were shipped all over the country. Lookout Mountain and the associated ridges were deforested by the turn of the 20th century. DeKalb County historian, John G. Chambers, reports that the tan-bark industry and salt peter mining were also important local industries.

The Tennessee, Alabama, and Georgia Rail Line

Railroad spur lines connected Lookout Mountain ore mines to valley furnaces. The railroad which was eventually known as the Tennessee, Alabama, and Georgia Rail Line (TAG Rail Line) was originally chartered as the Chattanooga Southern Railroad in Georgia in 1887 and in Alabama in 1890. The line went bankrupt and was reorganized in 1895 and again in 1902. In 1890 Colonel Woolsey Finnell, in charge of a surveying party laying out the railroad through Shinbone Valley, visited the Little River Canyon and remarked,

"Why go to Colorado to see the Royal Gorge...Little River Gorge is much longer, more rugged and almost as deep as the Royal Gorge. It is far more scenic."

Colonel Finnell ran the railroad about a mile from the southern end of the gorge or canyon. According to a local historian, the "new" railroad was known locally as the "Pigeon Mountain route."

Advertisements showed a white pigeon flying across the mouth of a tunnel going through Pigeon Mountain which is located in Georgia. This scenic route which ran the length of Lookout Mountain from Chattanooga, Tennessee, to Gadsden, Alabama, was renamed the Tennessee, Alabama and Georgia Railroad in 1911. Sometime between 1930 and 1951, the

TAG Rail Line discontinued passenger service and operated a small gasoline motor car, the "Scooter," to haul passengers and mail. In 1971, the line was purchased by the Southern Railway System and segments were abandoned in the 1980s. The TAG Line bridge near Yellow Creek Falls may be eligible for listing on the National Register of Historic Places.

Agricultural History

Some information on agricultural history, local economics and land use is available from the United States Department of Agriculture Soil Survey reports for the early 20th century. The earliest soil report for Etowah County, 1911, contains some important information on historical developments. It was reported that the rich valley limestone soils and alluvial soils of the Coosa River attracted settlers, but most Alabamians considered the soils in Etowah County too poor to cultivate. By 1911, Etowah County was considered "thinly settled."

Cherokee County farmers were practicing a diversified agriculture until after the Civil War when the cotton cash crop economy developed. Historic agricultural data for 1880 states that there were 2,412 farms and the average farm size was 104 acres but only 37 acres were cultivated. Sixty-two percent of the farms were owner-operated and the remainder were tenants. Corn and cotton were the primary crops. Cotton was always the cash crop and by 1919 cotton was planted on 54 percent of the cultivated land in Cherokee County.

Industrial Boom

The most conspicuous examples of "booms" and "busts" were perhaps in DeKalb County along the railroad between Birmingham and Chattanooga. One of these "boom towns" was Fort Payne (ca. 1890) where a coal and iron company was organized with a million dollars raised in New England for the project.

During the industrial boom period, two blast furnaces and a steel plant were constructed at Fort Payne. The plants were eventually dismantled and sold for scrap iron without ever being operated. Fort Payne was laid out by land speculators. The corporate boundaries of the city included 32,000 acres and the western boundary extends nearly to the Little River. In its boom era, Fort Payne's W. B. Davis Hosiery Mill was constructed. The Davis Mill and the associated mill houses may be eligible for listing on the National Register. Cultural resources reflecting the boom period include the Fort Payne Commercial District and Fort Payne Residential District. The Fort Payne Opera House (ca. 1889) is listed on the National Register of Historic Places as is the Fort Payne Depot.

By the 1880s, the town of Gadsden was experiencing population growth as migrant laborers came to mine ore and smelt pig iron. Gadsden, the "Queen City of the Coosa," developed into a major steel producing center by 1902. Four railroads served Etowah County by the 1920s and local industries included iron and steel foundries, lumber manufacturers, textiles plants, and the Goodyear rubber plant. Coal was supplied to the Alabama Power Company steam generating electric power plant. By the 1930s, the Gadsden District (Gadsden, Alabama City, and Attalla) had a population of 37,171. Two-thirds of the employed population was engaged in manufacturing, mining, and transportation. Twenty-eight of the county's 54 industrial plants were concentrated in the Gadsden District in the 1930s.

Late 19th Century Mountain Resort Development

Mentone was the focal point of a fashionable and popular vacation resort. Summer visitors came to Valley Head by train and rode horse-drawn carriages to the hotels and summer homes atop Lookout Mountain. The Mentone Springs Hotel is listed on the National Register of Historic Places. The Queen Anne style Victorian, three-story frame, 54-room hotel now contains arts and crafts stores. It was built ca. 1884 and was a popular resort until the economic depression of the 1930s. St. Joseph's on the Mountain is an Episcopal Church located in the center of Mentone. This rustic late Gothic Revival style church may be eligible for listing on the National Register.

DeSoto Falls Park Development

In the late 1920s, land speculators promoted a "high class residential development" on the west brow of Lookout Mountain near Valley Head. The plat of the 300-acre proposed mountain resort development "DeSoto Falls Park," dated 1926, shows the development site plan with the subdivision roads and land lots along the west bank of the Little River. The surveyor's plat shows a dam drawn above the cascade and falls. Also shown are the "ruin of stone walls" on a bluff peninsula downriver from the falls.

The promotional brochure contained photographs of the scenic DeSoto Falls and the "ancient fortress" or "DeSoto's Rock Houses." These rock shelters were first described in Albert James Pickett's History of Alabama in 1850.

In a DeSoto Falls Development promotional brochure, developers favored the construction of "rustic log" cottages or similar suitable mountain homes on choice water front, gorge front or inland lots. That theme is carried through in much of present day construction in the area.

The Dam at DeSoto Falls

Archival research indicates that Mr. A. A. Miller leased land owned by R. W. Libby in 1923. Libby's land was to provide storage water for the dam. Miller and the DeSoto Falls Development Company built the dam and sold it to the Fort Payne Utilities Company in 1927.

The dam was to supply water for the hydroelectric generator which was constructed below the falls on the west side of the gorge. A photograph (ca. 1926) shows a metal pipe leading from the dam down to the power house building below the falls. Electrical power was generated for Fort Payne, Collinsville, Mentone, Valley Head (Alabama), and Menlo (Georgia). Apparently the Great Depression prevented any further resort development.

The dam site was eventually conveyed to the Alabama Power Company. The machinery at the dam site was scrapped by Alabama Power Company when they determined that the hydro project was worthless. In 1931, the power company sold the DeSoto Falls Dam site to the DeSoto Falls Development Company.

Little River Power Company

In 1906, the Federal Government granted H. T. Henderson the right to divert waters on Federal lands in May's Gulf in the Little River Canyon near Blanche, Alabama, for the purpose of generating electricity. Henderson proposed constructing an earthen-filled dam at elevation 1,240. The property was later acquired by the Little River Power Company.

In 1909, Lockwood Greene and Company, engineers, prepared a survey of the proposed reservoir area. Detailed surveys, plans, and profiles were drawn. No action was taken. A testing scheme proved there was no solid rock under the proposed power house site, only 65 feet of earth and boulders. A better dam site was selected and additional detailed surveys were conducted in 1911. Archival documents show that the engineers considered constructing the dam at a narrow point in the river, "driving" a tunnel to the brow of the mountain, excavating a surge tank in the rock, and dropping the water through steel pressure pipes to the power house 2,000 feet up the valley and nearer to the TAG Rail Line. Engineers computed the reservoir would store 5 billion net cubic feet.

In February 1912, a final investigation was undertaken which included geologic drill tests and further mapping. A permanent camp was built to accommodate 100 men. A construction railroad was surveyed connecting the TAG Rail Line with the proposed dam site.

In 1917, R. A. Mitchell, the Director of the Little River Power Company entered into a joint agreement to merge with the Alabama Power Company.

Although the Alabama Power Company did not build the dam described above, a dam was built at DeSoto Falls by 1926.

In 1926, Alabama Power Company was concerned about newspaper reports concerning the United States Government reserve for a national park or donation to the State for a State park of lands below "our proposed dam of Little River." The corporation's land manager stated:

"With some concern I have recently noticed in the daily papers that an attempt is being made to have the United States Government reserve for a National Park, or donate to the State for a State Park, land on Lookout Mountain known as May's Gulf. This is the canyon below the Falls and below the site for our proposed dam on Little River. We have obtained the right to divert waters from the River as it flows through May's Gulf...now obtaining options on mineral rights in thousands of acres of land on Lookout Mountain with the idea of building a railroad in the bottom of the canyon should we decide to transport the coal, and should we erect a reserve steam plant on the ground the water from the coal washer would go down Little River, which would entirely spoil the beauty of the water itself and make our operation very objectionable to the project of the nature of a park."

Sixty-Ninth Congress

Congressman Miles C. Allgood introduced H. R. 11421 to provide for the transfer of Federal lands to the State of Alabama for a State park and game preserve. The 1,625 acres included the part of May's Gulf on the Little River which the United States had recently surveyed. Congressman Allgood's bill passed the House on June 9, 1926. Alabama Power Company officials were concerned since congressional action might impinge on the Little River hydro-electric project plans. The congressional act was approved on February 17, 1927, and accorded the State of Alabama the privilege of buying at a nominal price certain lots and parcels of land lying in what is known as May's Gulf in Township 8 South, Range 9 East, Huntsville Meridian.

Alabama State Forester, Page S. Bunker, described the May's Gulf land acquired from the Federal Government for the State park: "The National Park experts of the U.S. Department of the Interior regard this site as the most outstanding of its kind in eastern North America, and recommend its inclusion in the State park system if at all possible".

1930s to the Present

President Roosevelt's New Deal provided an impetus for developing the economic potential of the Upland South. The Farm Security Administration's program stimulated a rural rehabilitation, diversified agriculture, and increased food production. "These changes saw many sharecroppers leave the farm, as the power of cotton declined, while hay farming and cattle raising expanded." The Tennessee Valley Authority, Works Progress Administration, and Farm Security Administration were Federal programs established under the New Deal. The National Park Service and the Civilian Conservation Corps cooperated with the State to develop the parks beginning in 1933. Civilian Conservation Corps camps were located in Fort Payne and close to Edna Hill Church and the Little River near the G. Euclid Hill house (now Alabama Power Company land near the Alabama State Highway 35 bridge).

In 1934, the State Forestry Commission expressed concern about the power company's ownership of water rights and adjoining lands and plans to develop a hydroelectric facility along the Little River. No further action was taken by the State to develop a park in the canyon (May's Gulf). The State Forester asked the Alabama Power Company to reconsider their power plant plans in light of the current economic conditions. He wanted to see the "natural beauty of May's Gulf and its unique character as a scenic and geologic feature" preserved as a State park.

By 1934, the State established DeSoto State Park on the Little River in DeKalb County. DeSoto State Park was supervised by Frank Berry whose sister, the famous educator Martha Berry, donated land for the park. Mr. Frank Berry was the Superintendent of the Civilian Conservation Corps activities at DeSoto Falls. The park was dedicated in 1939. In 1937, the Alabama State Commission of Forestry and the National Park Service wanted to see the DeSoto State Park and the May's Gulf (Little River Canyon) located in DeKalb and Cherokee Counties combined into one substantial State park unit. Forestry personnel thought it was essential to the development of the project to connect the two areas. However, Alabama Power Company had title to the land along the river between the two tracts proposed for a State park. The State initiated consultation aimed at acquisition of the power company western tract of 40-acre lots in March 1937.

The DeSoto State Park area was a Civilian Conservation Corps project. Public recreational facilities including a stone lodge, 12 rustic log cabins, a superintendent's residence, an assistant superintendent's residence, hiking trails, and picnic areas were constructed. A locally quarried sandstone was used in construction. Today these structures built by the Civilian Conservation Corps may be eligible for listing on the National Register.

In 1937, Alabama Power Company was considering selling the Little River property, consisting of approximately 1,200 acres to the State of Alabama. The State was planning the development of a parkway and recreational area. The power company said that the National Park Service claimed that the development of DeSoto State Park would give Alabama the most outstanding park of its nature east of the Mississippi River. The power company anticipated that future development would increase the value of their remaining lands along the river.

In 1937, Alabama Power Company had a contract to cut timber on the west side of the Little River and had not at that time abandoned the idea of the development of a hydroelectric power plant on the river. The company prepared a map of the land on "western most tier of forties" which included 66 40-acre tracts or 2,640 acres which the State wished to purchase.

In 1939, the State again contacted the power company about acquiring additional land for DeSoto State Park. The Director of the Alabama Department of Conservation described May's Gulf (Little River Canyon) as an "ideal spot for the production and maintenance of desirable wildlife species and is widely known for its scenic beauty. The area could become a mecca for lovers of nature." He stated that it would be a good opportunity to build nature trails, bridle paths, etc. while the Civilian Conservation Corps boys were available. However, Alabama Power Company said that legal obstacles were "insurmountable."

In 1943, the Alabama Power Company entered into an agreement for mineral exploration and development with the U.S. Department of the Interior's Bureau of Mines.

The State of Alabama and the Alabama Power Company finally entered into an agreement for a cooperative wildlife management and public hunting area in 1967.

The Little River Canyon is surrounded by a number of National Register properties. These include: Mentone Springs Hotel, Winston Place, Fort Payne Residential Historic District, Cherokee Plantation, Alabama Builders Hardware Manufacturing Company, Alabama Great Southern Railroad Passenger Depot, Fort Payne Opera House, and Cornwall Iron Furnace. Significant sites have possible potential, but not yet determined merit, are DeSoto State Park's Civilian Conservation Corps developments, the dam site at the DeSoto Falls (rural electrification), Hood's headquarters, and the TAG Line Bridge (early transportation) within the envisioned boundaries of the park.

A formal survey together with inventory to locate all cultural resources, historic and prehistoric remains needs to be conducted on lands within the study area.

TAG RAIL LINE

The Tennessee/Alabama/Georgia (TAG) Rail Line offers an intriguing option as a complementary trail addition to the Little River study area. The TAG Rail Line forms a 100-mile corridor from Gadsden, Alabama through scenic northeastern Alabama and northwestern Georgia to Chattanooga, Tennessee. It lies to the east of and adjacent to the Little River Canyon and crosses the Little River at the Little River community below Daniel's Gap. Throughout the TAG Rail Line corridor most adjoining land is in agricultural use as either pasture or cultivated fields. A number of small family farms with homes, barns, and various out-buildings are dotted throughout the adjacent landscape. The rail bed is usually raised above the valley floor by 4 to 6 feet. Nearby homes and small commercial developments often occur where the right-of-way is intersected by roads. No apparent alterations to the abandoned rail line bed were observed during field investigations. There is, however, at least one incidence of private use overlapping the rail line bed north of Highway 68. It would appear that quarry access may encroach on the right-of-way.

The partially abandoned rail line can be divided into three sections based on actions taken by Norfolk Southern (parent company of TAG Rail Line). The first section runs from Gadsden to Ewing, Alabama, and was abandoned in 1988. Rail remains from Gadsden to Leesburg but has been removed from Leesburg to Ewing. Portions of this section have been sold to adjoining landowners. The second section stretches from Ewing to Kensington, Georgia, through some beautiful and rugged terrain. Abandoned in 1982, all rails have been removed from this section. The third section runs the 23-mile stretch from Kensington to Chattanooga, Tennessee. Norfolk Southern has leased the Kensington to Chattanooga section to a short line operator who has been successfully servicing a chemical plant in Kensington. Reports are that the short line has been financially successful and the operator is negotiating a new contract with the chemical plant in anticipation of plant expansion.

It is without question that the abandoned portion of the rail line has potential for meeting certain recreational demands. The Alabama Statewide Comprehensive Outdoor Recreation Plan (SCORP), Volume 1, Assessment and Policy Plan, December 1986, addresses recreation demand for 26 activities. The TAG Rail Line corridor is within Planning District 4 of the SCORP. Statewide, walking for pleasure and bicycling are presented as the first and second leading activities in terms of resident demand, respectively. Planning District 4 projects a deficit of 133 miles of bicycle trails to meet the demands in 1990. This deficit grows to 143 miles by the year 2010. There is a similar deficit in miles of footpaths for the walker. Somewhat surprising is the SCORP's finding that District 4 had a surplus of miles of backpacking/hiking trails and horseback riding trails.

Much of the section from Gadsden is already extensively used for trail rides, wagon trains, and hiking. Trail clubs in the area have spoken favorably for conversion of the rail line into a hiking, running, horseback riding, and bicycling trail. There seems to be a consensus that ORV's should be excluded, especially to reduce conflicts between user groups.

The upper (northern) section obviously remains in use and has been eliminated from further consideration in this paper. The remaining sections are unique for they could serve as a demonstration project focusing on two concepts. The first relates to the utility of connecting the three major sections of the envisioned park (Little River Canyon, Yellow Creek Falls, and Cherokee Rock Village). Although generally outside of the primary resource area, the rail line would make a narrow, continuous use corridor through a rather fragmented landownership pattern of rural Alabama. From a practical and economic standpoint about 10 miles of abandoned rail lines would be needed to connect the three units.

It would appear that the Norfolk Southern has already sold at least 12 segments to adjoining landowners in the lower two sections. While Norfolk Southern has been unwilling to provide the exact number of severances or the linear distances of each severance, it is apparent that negotiations would be required with Norfolk Southern and a number of private landowners. The entire corridor would have to be acquired, continuously, or trail development would not be possible. The standard Norfolk Southern selling price to adjoining landowners was reported to be \$1,000 which simply defrayed their cost to prepare and execute a quit claim deed. The National Park Service has received several letters from landowners adjoining the railroad right-of-way supporting the Little River study area, but opposing the inclusion of the TAG Rail Line corridor as a public trail.

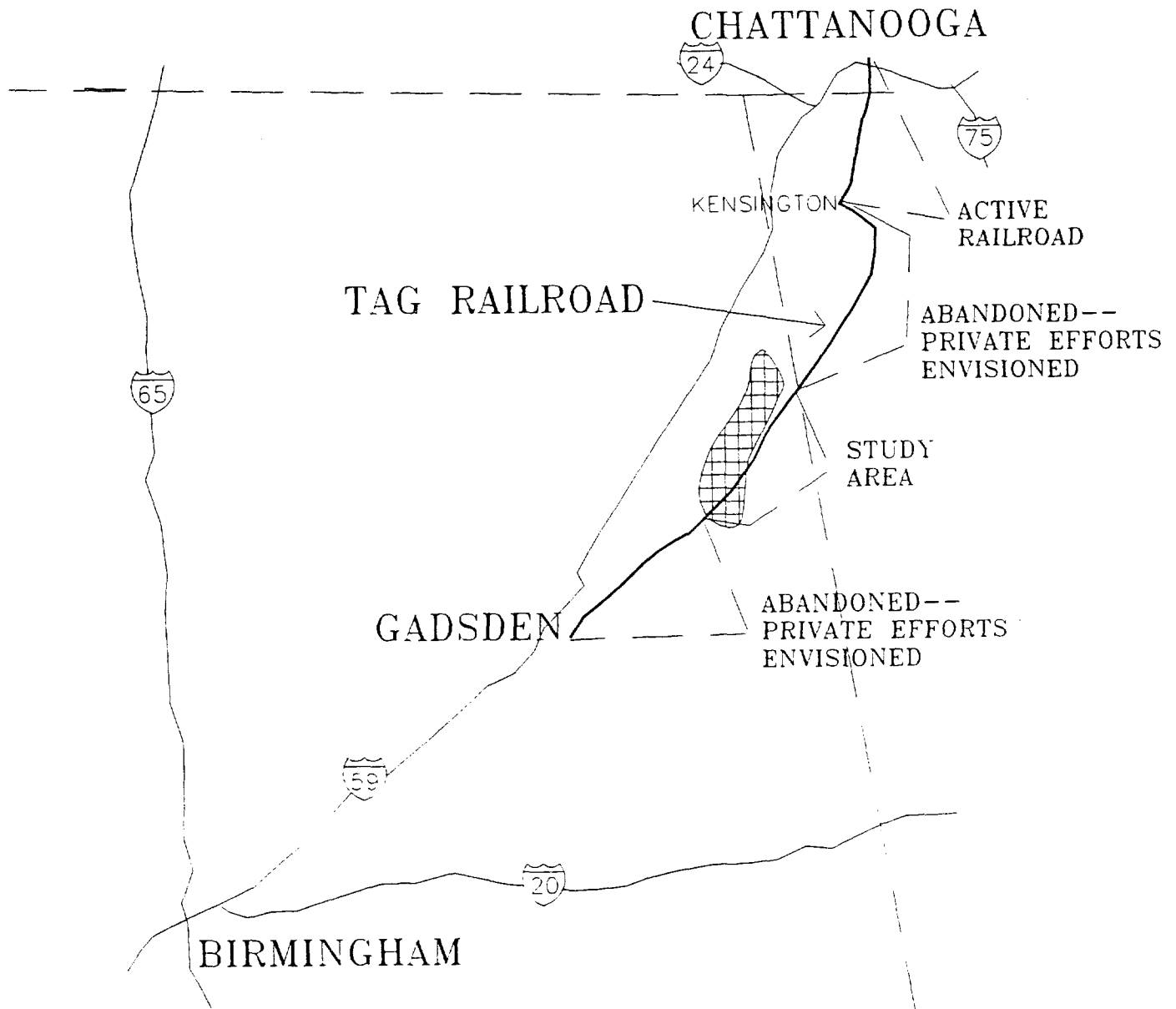
The Rivers, Trails and Conservation Assistance Program of the National Park Service's Southeast Region is assisting the city of Chattanooga and Hamilton County, Tennessee, in planning a network of greenways throughout the county. This greenways network will provide community access to the Tennessee River and Chattanooga's numerous other cultural, historical, natural and recreational resources using linkages such as abandoned railroad and trolley corridors, river and stream corridors and steep ridgelines. These greenways also have value in providing for wildlife movements. The Chattanooga greenways system has future potential for linkage to other regionally-significant resources, such as Little River Canyon in northeastern Alabama, using the abandoned TAG Rail Line corridor, if the TAG Rail Line is abandoned in the northernmost section.

Adjoining lands are undeveloped and are primarily in pasture or cultivation. Adjoining landowners are using the right-of-way as a means to access their agricultural land by truck or tractor. It is not felt that the corridor is in danger of being altered or destroyed; therefore, it should be available in the foreseeable future as a continuous corridor with trail potential.

Another concept deals with the Rails-to-Trails Conservancy. It is they who could, through their staff, carry on programs of technical assistance, negotiation, public education, and advocacy in working with and influencing further consideration toward extending the trail especially southward toward Gadsden. The Conservancy also could become a major influence in future planning efforts for linking the TAG Rail Line to other trail networks. This interaction with both the public and private sectors would bring a cohesiveness and possibly a cost efficient method of gaining additional recreational lands beyond that needed for the envisioned Little River Canyon Study area.

From the enthusiastic response to a Rails-to-Trails presentation at Centre, Alabama, during recent meetings with representatives from both Georgia and Alabama speaking in favor of the trail, it would appear that a viable option does exist for pursuit of this concept by non-Federal interests.

TENNESSEE ALABAMA GEORGIA (TAG) RAILROAD



LAND USE AND OWNERSHIP

Land Use and Present Condition

The land adjacent to the Little River is utilized primarily for recreational purposes. The west side of the canyon study area contains the 5,000-acre DeSoto State Park with its canyon rim road along the west rim of the canyon. Some farms, seasonal homes and a few permanent residences are found in this area. The eastern portion of the study area is dominated by the Wildlife Management Area owned primarily by Alabama Power Company. Several seasonal homes also are located in this area. The land has been subdivided and is being marketed for additional home sites.

The Yellow Creek area around its periphery and the Cherokee Rock Village area have been broken into smaller tracts with various ownerships.

As both the Yellow Creek and the Cherokee Rock Village areas are relatively undeveloped, it is assumed that the primary purposes of the tracts are recreational, timbering, and land speculation.

DeSoto Falls in the northern sector of the study area and DeSoto State Park on the northwest rim of the study area are managed for tourism by the State of Alabama. In addition, numerous private summer camps for children and the Comer Boy Scout Reservation occur at the upper end of the study area. The village of Mentone, north of the study area, is a well-known tourist resort.

Bordering the upper stretches of the river is a mixture of operating and abandoned farms. Reclaimed mines are found along the northern section of the East Fork and at the mouth of Yellow Creek.

DeSoto Scout Trail runs along Little River from the Comer Boy Scout Reservation to a point near the Alabama State Highway 35 bridge. Portions of the trail are frequently used by four-wheelers (four-wheeled motorcycles).

Along the east side of the river within the study area, the State of Alabama operates the Little River Wildlife Management Area (a hunting reserve) which is primarily for deer and turkey. The forests are mixed upland oak/pine and are all second growth. Food plots are scattered throughout the area. The Management Area is primarily owned by Alabama Power Company and is leased on a long-term basis to the State. Land just east of the Little River Wildlife Management Area is clearcut. Lands along the eastern edge of the canyon have been subdivided and approximately six homes have been built.

Several fords exist along the middle stretch of Little River between DeSoto State Park and the junction with Alabama State Highway 35. These fords connect unimproved roads ultimately linking DeSoto Parkway and Alabama State Highway 35 with Crest Road, an improved road joining Alabama State Highway 35 with Alabama 117 along the east side of the river. The fords are preferred sunbathing, swimming and picnicking spots. The roads are used by various off-the-road vehicles, horseback riders and hikers (since the DeSoto Trail runs concurrently with the roads for part of the distance).

Flatrocks above Little River Falls are used extensively by sunbathers. Woodlands above the falls are used for camping; however, the area is not administered for this purpose. The stretch of river from Little River Falls to the Little River Canyon Mouth Park is used by canoeists and kayakers, although the river is rather treacherous above the confluence of Bear Creek and most canoeists put in below that point.

The tableland along the east side of the canyon is cut extensively. Roads in the vicinity are unimproved and exit only to Alabama State Highway 35. Lots are owned privately along the brow of the canyon, although only a few actually have been built upon.

The plateau west of the river contains mostly forest. A road (Canyonland Parkway) runs the length of Little River with frequent vistas, turnouts and picnic areas.

A failed private tourist resort, Canyonland Park, together with its chair lift, is a dominant manmade intrusion on the west rim of the study area. The State of Alabama maintains a picnic area and overlooks in the vicinity. Hiking in the canyon is highly selective and specialized since the bottom is bouldery, thick with undergrowth and drift from the floods. Once the canyon is entered, it is challenging to the most experienced hikers to find an exit.

Little River Canyon Mouth Park, in the center of the study area, is operated by Cherokee County. The park is heavily used, as evidenced by the condition of the facilities. A large riverine pool is available for swimming. The park contains picnic and camping facilities and a small store.

Yellow Creek Falls, toward the lower end of the study area, is a beautiful and scenic display. The falls have excellent ecological integrity; however, the viewshed to the east is severely compromised by houses, a railroad trestle and soil extraction areas.

The Cherokee Rock Village unit, in the southern portion of the study area, is accessed by a broad, newly upgraded gravel road which runs parallel to the brow of the plateau and provides easy access to excellent vistas. A house, a major power line, an antenna and the main access road are the primary manmade intrusions in this area. The vegetation is primarily recent second growth oak/hickory with pine occupying the poorer soil areas. The topography is gently rolling to moderate and the area would readily accommodate recreational development amenities such as hiking trails, campsites and horseback riding areas.

Manmade Areas of Special Concern

Five dams on the two major tributaries to the river at the north of the study area, together with one at Canyonland Park, are of concern from a safety standpoint to users of the canyon area. Future use of the area by recreators would require some type of early warning devices to advise of catastrophic failure of the dams.

The 11 miles of road beginning at the former private Canyonland Park and winding south to Little River Canyon Mouth Park are in extremely poor condition. This chip and seal roadway is inadequately engineered for normal highway traffic. Each of the numerous natural cuts bisecting the road shows severe erosion. Closure of the road would be expected should it become Federal property, unless the road was substantially repaired prior to transfer to the Federal Government. Conversely, closure of the road could lead to its use as an excellent 11-mile hiking, biking trail on the rim of the canyon. With selective thinning of appropriate vistas and moderate facility development, a superlative recreational resource could be provided.

Ownership

Based upon current tax map records, there are 447 tracts in the study area. Of these, 42 tracts are State owned and 39 are corporate utility owned.

Potential Uses/Threats

The potential impacts from several sources or proposed uses could seriously threaten the cultural and ecological integrity of the area.

Threats within the study area are focused on the Little River, especially the canyon area. Primary among these are those from development. There is no zoning to control or set parameters on development in any of the three counties within the study area. Urbanization of the area from both commercial and private development while a county by county concern should be addressed in concert with the county governments before development threats become a reality. While development can occur anywhere along the boundary of the envisioned park, it is especially true of the Alabama State Highway 35 corridor which bisects the proposed park near its crossing with Little River. This particular area may become highly prized for its development potential.

In addition to urbanization, threats to the ecosystem also exist from many potential sources. Five dams along the upper stretches of Little River, and one dam in the lower, may pose threats downstream. None of the dams may meet minimum safety standards. If any dam is breached, the resulting torrent could scour and destroy the botanically significant areas of vegetation, cause secondary landslides, and adversely affect the aquatic as well as other fauna and flora within the canyon area.

The Little River corridor is a fragile ecosystem that could be altered with even small changes. Such is the case with the discharge of sewage into the river drainage system. During the conduct of the study, it was reported that two cases occurred. The first was a hog farmer who allegedly pumped his sewage holding lagoon directly into a tributary of the river and the other was a camp retreat believed to be releasing raw sewage directly into the river. Both cases were rectified by Alabama Department of Environmental Management with full cooperation of the parties involved.

Low levels of coliform bacteria have been detected in water samples in several spots along the river. As population density increases on the mountain, it is expected that pollution may increase, unless firm steps are taken to prevent or lessen the degradation.

Unlimited access to the western rim of the canyon has led in the past to problems with the proliferation of garbage, trash, and abandoned vehicles being dumped into the gorge. While this temporarily causes aesthetically displeasing and unsafe conditions, the Superintendent of DeSoto State Park and the DeKalb County Solid Waste Supervisor have led major campaigns with the environmentalists and the military to remove cars and debris from the canyon. Significant forward strides were made during 1990-91.

While many of the upper corridor residents who own land along the river are vehemently opposed to the creation of a park, it is they who point out that they do not wish to see strip mining returned to the area. Their reasons focused on past mining operations and the loss of stream quality through siltation. Many recognized the potential loss of endangered or threatened species because of pollution.

Because the area is easily accessible by transmountain roads, there is always the potential for chemical or other spills occurring as the result of motor vehicle accidents or leakage.

During the study, the Little River Canyon area was targeted in a three state (Alabama, Tennessee, Georgia) air force military operation for low level training exercises. Comments offered through the environmental review process appear to have eliminated this threat.

Threats and potential threats to archeological and historical resources of the area come from looting, cultivation of fields where ploughing disturbs sites and uncovers artifacts for surface gatherers, natural erosion from stream or wave action as well as inundation. Development of road access, site visitation and even wind action may affect site resources. Two positive benefits from the creation of a park are the full Federal protection of the cultural resources and the opportunity to interpret archeological and historical resources for the benefit of the visiting public.

RESOURCE TYPE

The outstanding natural, cultural, scenic, aesthetic, recreational and scientific qualities of the Little River Canyon area when combined, contribute to an area of significance having possible merit for national protection. Additional significant areas may become evident once a cultural resources survey is conducted. Some of these areas may have significance as a part of a larger national story. If authorized as a unit of the National Park System, Little River Canyon Park could address several history and prehistory themes and subthemes representative of the cultural heritage of the region. The following themes could be interpreted in the study area based on events that took place. However, not all of these themes are represented by a specific site or structure within the study area that is listed or eligible for listing on the National Register of Historic Places. The themes and subthemes are identified, together with examples, in the 1987 report, "History and Prehistory in the National Park System," and are used to indicate the extent to which units and cultural resources of the National Park System, affiliated areas, and National Historic Landmarks reflect the Nation's past. Represented at Little River and keyed to the 1987 report are:

- I. Cultural Developments: Indigenous American Population
 - A. The Earliest Inhabitants
 - B. Post-Archaic and Pre-Contact Developments
 - C. Prehistoric Archeology: Topical Facets
 - D. Ethnohistory of Indigenous American Populations
 - 1. Native Cultural Adaption at Contact
 - 2. Establishing Intercultural Relations
 - 3. Varieties of Early Conflict
 - b.4. Military Removal and Concentration
- X. Westward Expansion of the British Colonies and the United States, 1763-1898
 - C. Military-Aboriginal American Contact and Conflict
 - 1. East of the Mississippi, 1763-1850s Horseshoe Bend
National Military Park
- XI. Agriculture
 - B. Plantation Agriculture 1607-1860 Green Springs Historic District,
VA. (affiliated area)
 - C. Era of Subsistence Agriculture, 1763-1820
 - D. The Plantation Breaks up, Sharecropping and Tenant Farming, 1860-
- XII. Business
 - A. Extractive or Mining Industries Saugus Iron Works NHS
 - H. Power and Lighting (Early Hydroelectric Dams)
- XIV. Transportation
 - B. Early Turnpikes, Roads, and Taverns East of the Mississippi
- XVI. Architecture
 - Subthemes to be evaluated for the study area

XVII. Landscape Architecture Federick Law Olmsted NHS, MA., Green Springs Historic District, VA (affiliated area), and National Capital Parks
Old proposals for scenic mountain roads - Col. Howard and Boosters)
(National Park Service-CCC-Alabama State Parks and the development of DeSoto State Park).

XVIII. Technology

B. Transportation (TAG RR Line and the mountain top scenic roads)
Allegheny Portage Railroad NHS

F. Extraction and Conversion of Industrial Raw Materials (Coal, Iron Ore, and Limestone)

XXXII. Conservation of Natural Resources

C. The Conservation Movement Matures, 1908 - 1941

1. The Emergence of Federal Conservation Legislation
(The National Park Service, Civilian Conservation Corps, and the Alabama State Parks)

10. The Great Depression and Conservation

XXXIV. Recreation

E. General Recreation

2. Resort Communities

In like manner, "Natural History in the National Park System..." Natural Resource Report (NPS/NR/NRTR-90-03) of September 1990 which updated the "National Park System Plan--Natural History" (1972)--addresses several themes from the best examples of our great national landscapes, shores and undersea environment; the processes which formed them; and the life communities that grow and dwell in them. This document can be used as a thematic framework for gauging, in part, nominations for new parks. The reader is cautioned that natural and cultural values and resources are only two of many considerations being used in the evaluation of this area for designation as a possible national recreation area.

Themes present within the study area, together with examples from existing National Park Service areas, include:

Appalachian Plateaus

Landforms of the Present

Plains, Plateaus, and Mesa (Obed Wild and Scenic River) (Russell Cave National Monument)

Mountain Systems (Big South Fork National River and Recreation Area, Cumberland Gap National Historical Park, Obed Wild and Scenic River)

Sculpture of the Land (Big South Fork National River and Recreation Area, Cumberland Gap National Historical Park)

River Systems and Lakes (Big South Fork National River and Recreation Area, Obed Wild and Scenic River)

Caves and Springs (Big South Fork National River and Recreation Area, Russell Cave National Monument)

Geologic History

Cambrian - Early Silurian Periods (Delaware Water Gap National Recreation Area)

Late Silurian - Denorvian Periods (Delaware Water Gap National Recreation Area)

Mississippian - (Chickamauga and Chattanooga National Military Park, Big South Fork National River and Recreation Area)

Land Ecosystems

Eastern Deciduous Forest

(Big South Fork National River and Recreation Area)

(Russell Cave National Monument)

(Cumberland Gap National Historical Park)

(Delaware Water Gap National Recreation Area)

(Obed Wild and Scenic River)

Aquatic Ecosystems

Underground Systems - (Russell Cave National Monument
Cumberland Gap National Historical Park)

Streams - (Big South Fork National River and Recreation Area,
Cumberland Gap National Historical Park, Obed Wild and
Scenic River, Russell Cave National Monument)

There are no unrepresented natural history themes in the Appalachian Plateaus physiographic Province although several subthemes can be supplemented to the benefit of the Service. Several existing National Park Service units include examples of river systems of the Appalachian Plateau Physiographic Province. These include New River Gorge National River, Obed Wild and Scenic River, Upper Delaware Scenic and Recreational River, Delaware Gap National Recreation Area, and Big South Fork National Recreation Area. The Bluestone National Scenic River and Gauley River National Recreation Area, added to the National Park System in 1988, also include examples of this type of resource.

The natural resources and recreational opportunities at Little River would to some extent duplicate the opportunities available in other National Park Service units. However, Little River is distinct from the others because the represented areas are generally found in the middle and northern sections of the physiographic region with no representation in the lower areas where the Appalachian Plateaus, Piedmont, Gulf Coastal Plain and Ridge and Valley come uniquely together in Alabama. The uniqueness of the mountain with its synclinal strata, its diversity of flora and fauna with proximity to the Coastal Plain, Ridge and Valley and Piedmont, contribute to its special significance not represented elsewhere within the National Park System. Furthermore, Little River would strengthen those themes represented by being an unusual example of a stream flowing for most of its length on top of a mountain (high plateau). Its outstanding scenic qualities, physical and topographic features, textbook examples of anticlines and synclines and special landscape features would strengthen the Appalachian Plateaus representation within the service and add to its outstanding recreational potential.

Selection and further development of these themes would come through the future General Management Plan and Interpretive Prospective planning processes. The plans will explain in more detail the questions of how, where, and through what media the interpretive message should be explained or presented to the visitor.

RESOURCE SIGNIFICANCE



RESOURCE SIGNIFICANCE

NATIONAL SIGNIFICANCE

Outstanding Examples of Resources

The Little River Canyon area has been judged to be a resource that is a unique combination of natural, cultural, and recreational features that collectively offers outstanding opportunities for public use and enjoyment. This combination of values together with the recreational opportunities can satisfy National Park Service standards even if any one of the values (natural, scenic, recreational, etc.) would not independently be considered of national significance. It is a prime example of the recreation area category of parks for it provides a special setting for a variety of recreation activities; it is a spacious area near to population centers; it is an area that protects unique recreation resources which are fast disappearing with the population growth in "rural" Alabama; and it offers outstanding opportunities for public use and enjoyment. Based upon this judgment, it is suggested that protection and public utilization of the area be undertaken for the benefit of present and future generations.

This area has been reviewed under the National Natural Landmarks program. Based upon this review, it has been identified for possible National Natural Landmark consideration representing the theme of river systems in the Appalachian Plateaus.

Exceptional Value for Interpreting Themes

The area possesses exceptional value in illustrating and interpreting the theme of river systems in the Appalachian Plateaus as well as supplementing or filling subthemes such as the Era of Subsistence Agriculture, 1763 - 1820; The Plantation Breaks up, Sharecropping and Tenant Farming, 1860 - and The Conservation Movement Matures, 1908 - 1941, to name a few. The area's accessibility from the major population centers of Atlanta, Birmingham, Huntsville, Gadsden, Chattanooga, Nashville, Montgomery and Memphis (all within a few hour's drive) place it in an outstanding location where these themes and subthemes can and should be interpreted for the benefit of the people--many of whom witnessed the more recent history being made there.

Superlative Opportunities for Recreation

The area offers exceptional opportunities for recreation and public use and enjoyment for biking, camping, canoeing, kayaking and natural and historical related pursuits (photography, historical information collection and study). Secondary recreational pursuits of fishing, swimming and hunting are also readily available and offer good to outstanding opportunities from a national perspective.

Integrity of Resource

Based upon the area's unique confluence of physiographic provinces, its position as the northern and southern limits of numerous flora and fauna, and its exemplary river canyon system, it provides a spectrum of biological diversity unparalleled in the region. As such, it presently is utilized for and has the potential to be increasingly recognized as an exceptional laboratory for scientific study.

Little River Canyon, although directly influenced by man in numerous historical contexts, has never surrendered to his activities and remains basically an area evidencing man as a part of our ecosystem, but with nature as the dominant force. The land, river and canyon, and the presence of man, remain true and accurate, with a high degree of integrity--one of existing National Park Service criteria for parks.

RESOURCE SIGNIFICANCE

Suitability

SUITABILITY

An important consideration, one essential to the understanding of suitability, relates to how well the resources at Little River compare to those already protected in other areas of the National Park System. There are no natural or cultural themes or types of recreational resources not represented in the National Park System known to this area, but there are no guidelines that would preclude consideration as a new area through the overlapping of themes. The Little River, however, would fill or supplement various subthemes of the National Park System. It might have qualities that might place it above certain areas already within the System. If not ranked above, it certainly supplements features found in existing parks. It is a biologically rich area, one of diversity, which lends itself to the further stabilizing and rounding out the System. The addition of the area to the System would insure that the area's biological diversity would be preserved and carried into the 21st century and beyond.

A review of other National Park System units within this same physiographic province indicates that there are five with some similar attributes, Obed Wild and Scenic River, Big South Fork National River and Recreation Area; Cumberland Gap National Historical Park; Russell Cave National Monument; and Delaware Water Gap National Recreation Area. Of these five units, only two offer enough similarities to be considered as being appropriate for comparison, Big South Fork National River and Recreation Area and Obed Wild and Scenic River.

Cultural Resources

Little River's long history of human habitation and use and sequence of recorded events that occurred there make it significant as an archeological and historical link to this Nation's history. It should be noted that the earliest human presence at Little River and the surrounding area most probably resulted from an appreciation of the abundant natural resources to be found there.

The following are three cultural periods relevant to the area and how these periods also relate to the Big South Fork and Obed Rivers.

Prehistoric (6000 BC-1530 AD) - Big South Fork National River and Recreation Area and Obed Wild and Scenic River contain prehistoric archeological sites of varying ages. It may be possible that significant Paleo materials (12,000 BC-8000 BC) may be found within the study area because of finds to the north in the Tennessee River Valley and to the south on the Fort McClellan Military Reservation. Fluted projectile points are occasionally reported by Cherokee County collectors.

Early Historic (1539-1820) - Neither Big South Fork National River and Recreation Area nor Obed Wild and Scenic River has Little River's close proximity to Hernando de Soto's expedition. Most scholars place De Soto's army in the Coosa River Valley at the juncture of the Little River in Cherokee County.

Late Historic (1832-Present) - The Little River area is superior to Obed Wild and Scenic River and Big South Fork especially in cultural associations with the Cherokee removal (Trail of Tears). With white expansion into Indian territory, together with subsequent industrial development based on coal and iron resources, the area prospered. This period of history can be considered as adding to a further filling of many of the subthemes not adequately represented in the National Park System.

Geology

The uniqueness of a river that flows for most of its length on top of a mountain (actually a high plateau) then in its last 12 miles deeply incises itself through the strata forming one of the deeper (in terms of depth) and most extensive canyon systems east of the Mississippi River is superior to that found at Big South Fork National River and Recreation Area and Obed Wild and Scenic River. The strata are unique in that they are synclinal in nature (bowing downward in the center) to form a mountain. Recreational pursuits are strongly linked to these unique features for rock climbing, canoeing, kayaking, and enjoyment of the area's scenic beauty. While Obed Wild and Scenic River and Big South Fork National River and Recreation Area have some generally similar characteristics, they do not have the mountain top stream or the easily observable synclinal mountain.

Flora/Fauna/Scientific

The area's geology and stream morphology are the foundation for diverse habitats. Of special added interest to the Little River area is its location in the confluence of several physiographic regions leading to a biological diversity of scientific importance. The Indiana bat, Southern bald eagle, and American peregrine falcon have been seen or are probably in all three areas. While the natural history of Little River is roughly comparable to Big South Fork National River and Recreation Area and Obed Wild and Scenic River, Little River's location at the extreme southern end of the Appalachian Plateaus region contributes to its special significance as a result of the intermingling of the more northern species of flora and fauna of the Cumberland Plateau section of the Appalachian Plateaus Province with those species of the Coastal Plain, Piedmont, and Ridge and Valley Provinces. Several universities (Jacksonville State, Auburn, and Alabama) have research programs focused on the area.

Recreation/Scenic

In a comparison of the three areas, all have about the same recreational potential but Little River Canyon is superior to the others by being easily accessible within an easy commute of major population centers such as Birmingham, Atlanta, Chattanooga, Gadsden, Nashville, and Memphis. This accessibility together with the linear character of the resource makes it desirable for the conservation of fossil fuels and the ready dispersal of visitors to the area. The extensive canyon system with various overlooks into the canyon, the many waterfalls and splendid vistas of the valley and ridge province and Weiss Lake give Little River a particular edge over the other two areas. Recreational pursuits are generally the same in all three areas.

Watershed

The landforms of Little River, Big South Fork National River and Recreation Area, and Obed Wild and Scenic River have well defined watersheds. Little River is superior to both the Obed Wild and Scenic River and Big South Fork National River and Recreation Area in its water quality. The Environmental Impact Statement for Big South Fork National River and Recreation Area states, "Water quality in many of the small undeveloped watersheds within the proposed national recreation area is excellent and stream water is potable. However, many small streams and several major watercourses in the Big South Fork National River and Recreation Area basin have periodically or permanently serious pollution which must be controlled to ensure ecological stability, high aesthetic quality, and public safety." The report

attributes the pollution to siltation, mineral iron build up, and sulfuric acid mostly from soft coal mining. The Obed Wild and Scenic River is impacted from mining on Emory River as well as from occasional releases from gas operations and sewage. Little River does not have these influences.

Summary

It is the cumulative effect of the individual recreational and natural resources, together with the scenic, scientific, and aesthetic qualities, all within a rather limited geographic area, that makes Little River truly unique and of special national significance.

CONFIDENTIAL

Feasibility

CONFIDENTIAL

FEASIBILITY

The test of feasibility for a new area involves weighing values and public need served by an area against its potential for efficient administration at a reasonable cost.

Size/Configuration

In subsequent sections of this report four alternatives (labeled A through D) for the protection of the area are presented. Each alternative (A through C) embraces ample territory required for preservation, interpretation and administration of the area's historical, recreational, natural values and each would serve the needs of the public. Initial study boundaries began with the three primary counties. This was later refined to a working study boundary which was utilized in public meetings. Based upon public input and additional area reconnaissance, the study area has been reduced to include important resource values while: avoiding where possible the acquisition of private houses; providing for manageable boundaries; and avoiding costly liabilities to the Federal Government (for example--inoperable dams). The criteria utilized in the formation of Alternatives A and B are found below. The criteria for the Alternative C Wild and Scenic River option is determined by the river itself and the implementing laws governing the width and acreage in such river corridors. The size and configuration of Alternative D "Non-Federal Ownership" would be determined by State and local interests.

Boundary Criteria

An acceptable boundary for an envisioned unit of the National Park System should provide for the inclusion and protection of the primary resource or resources; sufficient surrounding area to provide a proper setting for the resource or to interrelate a group of resources; and sufficient land for appropriate use and development. The following criteria were used for this exercise.

Specific Criteria for Boundary Determination at Little River Canyon Study Area*

1. Protecting the primary resources:
 - A. Natural--the river, the canyon (generally defined as having a 200-foot setback from the appropriate rim demarcation), nationally endangered species habitat, and unique scenic vista
 - B. Cultural--early man, De Soto, Native Americans, and agricultural development themes
 - C. Recreational--kayaking, rafting, canoeing, rock climbing, hiking, horseback riding, camping, and picnicking
2. Protecting the secondary resources:
 - A. Natural--watershed, scenic vistas, State endangered species, and biological diversity
 - B. Cultural--industrialization and Civil War themes
3. Providing appropriate and adequate space for administrative needs--access, parking, maintenance areas, and visitor services

4. Avoiding unmanageable segments--areas where law enforcement, visitor use, safety and maintenance would be extremely difficult
5. Following appropriate natural or manmade lines of demarcation--streams, ridges, roads, and trails including property boundary lines
6. Avoiding severance of property and uneconomic remnants when possible

*The numbered criteria are in general priority order.

Potential for Efficient Administration at Reasonable Costs

Acquisition, design and construction can begin only after the necessary authorizing legislation is adopted and funds are available.

Acquisition

Based upon preliminary estimates, land costs for Alternatives A, B, and C have been tabulated. More detailed estimates based upon required National Park Service policy are presently being calculated. For purposes of this document only, the following estimates for Alternatives A, B, C are \$9, \$29, and \$6 million, respectively.

It would appear to be advantageous to act swiftly before major development is underway or further subdivision takes place that could escalate land acquisition costs. There are no acquisition costs associated with the anticipated donation of lands held by the State of Alabama except for those incidental expenses attributable to title and survey services.

Development

Development proposed for Alternatives A, B, and C is expected to cost \$3.9, \$5.6 and \$1.8 million, respectively. Those costs include facilities needed for public recreational uses and administration as well as those needed for interpretation of the human and natural history of the area.

There are certain requirements and general costs required in gaining initial insight into the project. It is anticipated that further archeological study will be required to locate and examine in detail the rock shelters and historic sites associated with early occupation and to evaluate further their extent and relationships. This study would cost approximately \$200,000. All other studies including the General Management Plan, Historic Resource Study, Historic Structures Reports, historic base maps, and study of historic properties are estimated to cost approximately \$385,000.

Operations

Estimated annual operating expenses would escalate as property is acquired and visitor services are added. Based upon historical development of similar areas, the expected personnel at the area would increase by approximately five people for each of the first 9 years of operation.

By the tenth year of operation, it would be expected that the Federal presence under options A, B and C would be in the range of 35 to 45 people. Annual budgets at this stage for operations are projected at between \$1.8 and \$2.2 million annually in 1991 dollars.

Other Factors

Land Ownership/Availability

There are approximately 447 parcels of property in the largest alternative (Alternative B). That alternative totals approximately 34,000 acres of land. It is estimated that of this total, approximately 5,000 acres are held by the State of Alabama and approximately 10,000 acres are owned by Alabama Power Company. There are several landowners in the 1,000 to 1,500-acre category. The remainder of the tracts are in small ownerships. Generally, tracts with high value improvements or single family dwellings have been deleted from consideration during this initial planning phase. A future Land Protection Plan would consider carefully a number of different alternatives and strategies that would protect the integrity of the resources. Among these alternatives are scenic easements, life and term estates, deferred acquisition, or other methods that might accomplish the purposes of the park.

The study team did not conduct a survey of owner willingness to sell. A number of landowners, perhaps the majority of those who spoke at the public meetings, raised objections to the "taking" of their land. In contrast, there have been some exploratory contacts from landowners concerning the possibility of offering lands for park purposes. There also have been several resolutions from planning groups, conservation groups, and civic organizations in support of a park in the area.

Access

Interstate 59, the major north-south highway between Chattanooga, Tennessee, and Birmingham, Alabama, parallels the study area. The envisioned park would be only 20 to 25 minutes from I-59. The interstate and related major highways provide easy access to the area from cities in Tennessee, Georgia and Alabama as well as Mississippi, Arkansas, and the Carolinas. State Routes 68, 176 (the Lookout Mountain Parkway), 273, 117, and 35 serve the study area. The Lookout Mountain Parkway traverses the area linking Chattanooga, Tennessee, with Noccalula Falls Park at Gadsden, Alabama. Scheduled air service reaches both Chattanooga and Gadsden.

Dams

As a part of the study, the Regional Civil Engineer participated in field observations of some of the hydraulic structures previously mentioned in this report.

Of the six known dams none is envisioned for control by the National Park Service within the overall park boundary. However, one may be attempted to be added in the expected legislation. This dam is about 200 feet in length and approximately 30 feet in height and is located within DeSoto State Park above DeSoto Falls. The engineer reported, "Seepages are detected along the valley of the left and right abutments with leakages through the dam downstream face along the 2-foot line above the toe of the dam. Surface cracks appear randomly on the downstream face." He called for a complete "...structural investigation of the dam to verify its integrity for both stabilization and overturning from reservoir forces." Additionally, he recommended early warning and detection systems if improvements on the downstream of the dam are being considered.

A second dam at Canyonland Park which is envisioned for inclusion in Alternative B is situated about 250 feet upstream of the Little River Parkway (Rim Drive). He reported, "The impounded water is freely spilling over the crest and emptying into the downstream culvert beneath the parkway." He recommended an assessment of the spillway's capacity and its condition to determine its stability to withstand the overtopping and sliding from the reservoir forces together with an early warning and detection system to warn motorists along the parkway of the failure of the reservoir.

A third dam at Lahusage, outside the envisioned park boundaries, was described as, "The crest is being utilized as the overflow spillway with half of the dam section washed away due to recent flooding. There are horizontal cracks along the downstream face of the dam on the right abutment." He further added, "Tree stumps and debris are deposited along the upstream face of the dam." It was observed that corroded reinforcing steel bars and severe cracks along the downstream face of the dam require a complete structural inspection for stability and sliding. The engineer stated, "It is important that the dam be reconstructed to its original form before any improvements to the downstream area are made."

Access to the remaining three dams was not available. These dams are generally lower (3 to 5 feet in height) and of a much lesser significance.

Based on these preliminary findings, this study can only suggest an additional indepth investigation as to the structural integrity of the dams and assessment of future safety factors for those using areas downstream. An engineering study of this nature goes beyond the limits of this paper and would need to be appropriately scheduled and funded.

While only one dam, retained under State control and title, may be suggested for incorporation into the boundaries of the park, there remains a possibility for the addition of the Canyonlands Park dam, should that property be acquired. The remaining four dams are outside the boundaries, but like the previous two, could affect areas downstream should they breach. It should be recognized that all of the dams withstood major stress during the 1987 flooding when 18" of rain fell in approximately 3 hours.

To eliminate from consideration the areas downstream from the dams would also eliminate the essential core area of a park which focuses on a portion of the river and its canyon. Operational and maintenance responsibilities for the DeSoto Falls dam, as well as the costs therefor, would be required of the State unless congressional authority recognizes the need for Federal assistance in engineering studies together with possible dam stabilization, if required.

DEVELOPMENT

Development of the area is projected to consist of all of the following under Alternatives A, B and C; however, the magnitude of development would vary under each option.

Canyon Area:

- Road Improvements
- Vista Clearing
- Viewshed Access Points
- Maintenance Area
- Park Administrative Headquarters
- Visitor Contact Stations
- Development of Hiking, Walking and Horseback Riding Trails and Parking
- Development of River Access Points and Parking Areas
- Historic Restoration

Yellow Creek Area (Alternative B only):

- Road
- Parking
- Visitor Contact Station
- Picnic Area
- Hiking Trails
- Vista Management

Cherokee Rock Village Area (Alternative B only):

- Camping
- Trail Development
- Roads
- Parking
- Archeological Protection Management
- Hiking and Horseback Riding Area

For all major development programs (administrative center, maintenance area, etc.) adaptive reuse of existing areas is envisioned. The State of Alabama informally has requested operational control of the visitor service facilities currently under their jurisdiction (lodge, cabins, pool and tennis courts). The study strongly recommends that this request be formalized should a Federal presence be authorized.

Adaptability of Land Resources

The land and water resources are well suited to interpretive, educational and scientific use. Because of man's previous impacts on the area, some of the projected use is suggested for those areas already altered or disturbed. Such is the case at the Cherokee Rock Village where extensive timbering has taken place. The already disturbed areas could be adapted for public picnicking and camping sites that could help ease the pressures on the middle and upper portions of the park and provide a reservoir of land for future development. These land resources would provide some of the more spectacular views of the valley floor below the escarpment. Included in all three alternatives are archeological and historic sites that will become focal points in the development of the park. Some of the archeological investigations may be adaptable to onsite interpretation by professional archeologists as their work is being

conducted. Historic preservation provisions and implications would need to be addressed before any alteration to structures or the land takes place for development or interpretive purposes. Because of the thin mountain soils, there will be challenges in disposal of wastes, especially sewage.

Visitation Potential

Little River Canyon has the potential for offering the visitor unique opportunities with regard to recreational pursuits. These recreational activities, whether they be active or passive, are expected to be strong magnets attracting visitors to the area. Because of the area's diversity of resources, it is expected that it will, in addition to its other attributes, fill a void in linking together pieces of history. Specifically, the battles at Chickamauga and Chattanooga with the campaign for Atlanta and Sherman's march to the sea. Little River will be the place that attracts the visitor to the scenic grandeur of the canyons and waterfalls, the high sandstone bluffs and excellent opportunities for biking, hiking, canoeing, kayaking, tubing, camping, and similar recreational pursuits.

There were 955,084 visits to nearby Chickamauga and Chattanooga National Military Park in 1990 and 1,762,950 visits to the Chattahoochee River National Recreation Area in Atlanta. The potential for this area would probably lie between the visitation levels for these two areas.

Hazardous Waste

Numerous reconnaissance visits to the study area have not uncovered any indications of hazardous waste. Past practice of dumping cars off the edge of cliff areas has been largely discontinued and almost all abandoned cars have been disposed of by State park activities. Several strip mines do exist outside of the study area. It could be expected that historical mines for coal and iron ore could be uncovered in parts of the study area. Similarly, the remains of timbering operations could be expected to be uncovered in areas of obvious second growth timber operations. There are no known hazardous waste operations or hazardous waste sites in the study area.

Threats to the Resource

There are several threats to the resource. The primary threat is from harm to the numerous spectacular viewsheds from seasonal and primary home development on the rim of the canyon and the brow of the Cherokee Rock Village. Secondary threats are associated with harm to water quality from upstream farming, mineral extraction and sewage from residential development. Timbering also poses a level of threat to the area although there is historical evidence of a level of compatibility with timbering in the area. Past threats which are not presently imminent but which could surface are damming of the river for hydroelectric power or using the canyon as a reservoir for water storage.

Public Interest and Support

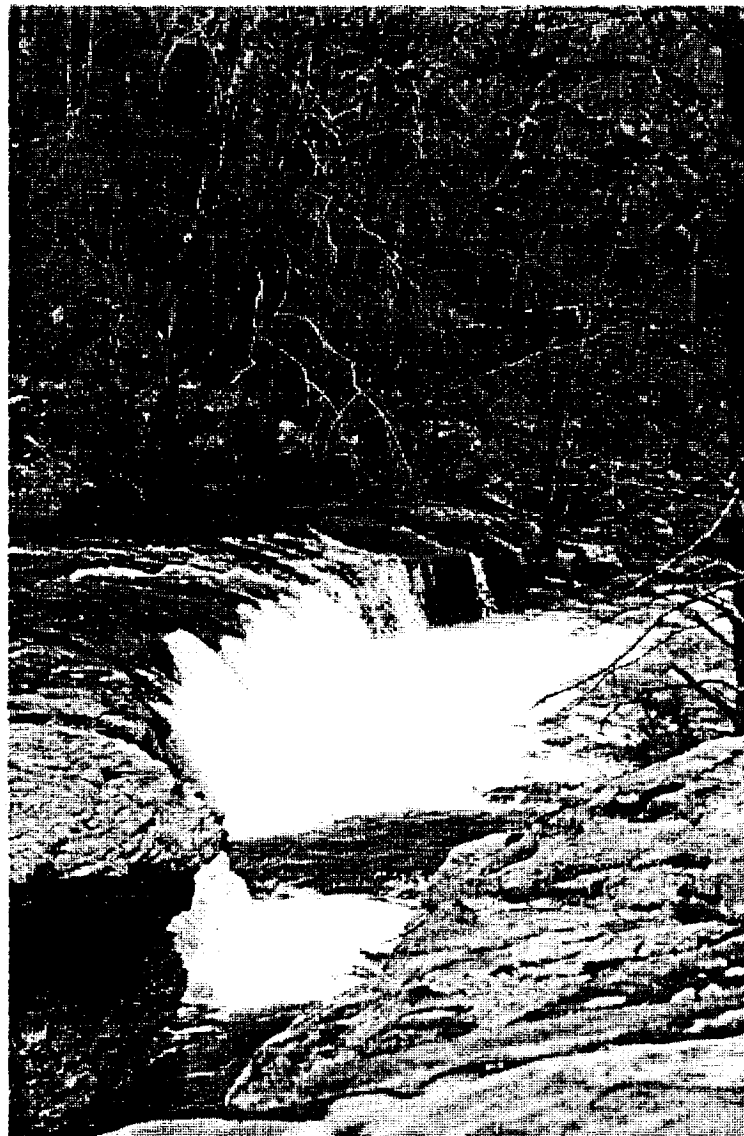
Many State and local officials have endorsed the project. State park staff and policy level conservation officials arranged and promoted tours of the area. Their assistance in the study is both acknowledged and appreciated. Congressman Beville has been very supportive of the study effort. He has held public meetings on the study and coordinated visits by other Congressmen to the area. The State's Senators have not indicated their position.

Initially in the study process there was strong local support for a park. Although the larger community support remains strong, potentially affected study area landowners have expressed strong concern over the perceived "taking" of their lands. They have organized a community group under the name "Save Our Land" and have expressed their concerns at the Federal, State and local level.

Another affected owner and neighbor of note is Alabama Power Company. The company has indicated a desire to have certain areas taken out of the study area.

Other neighbors, some with economic interests, and others with strong conservation concerns, have formed support groups for the park and have actively promoted the study through meetings and newspaper articles.

ALTERNATIVES FOR PROTECTING THE RESOURCES



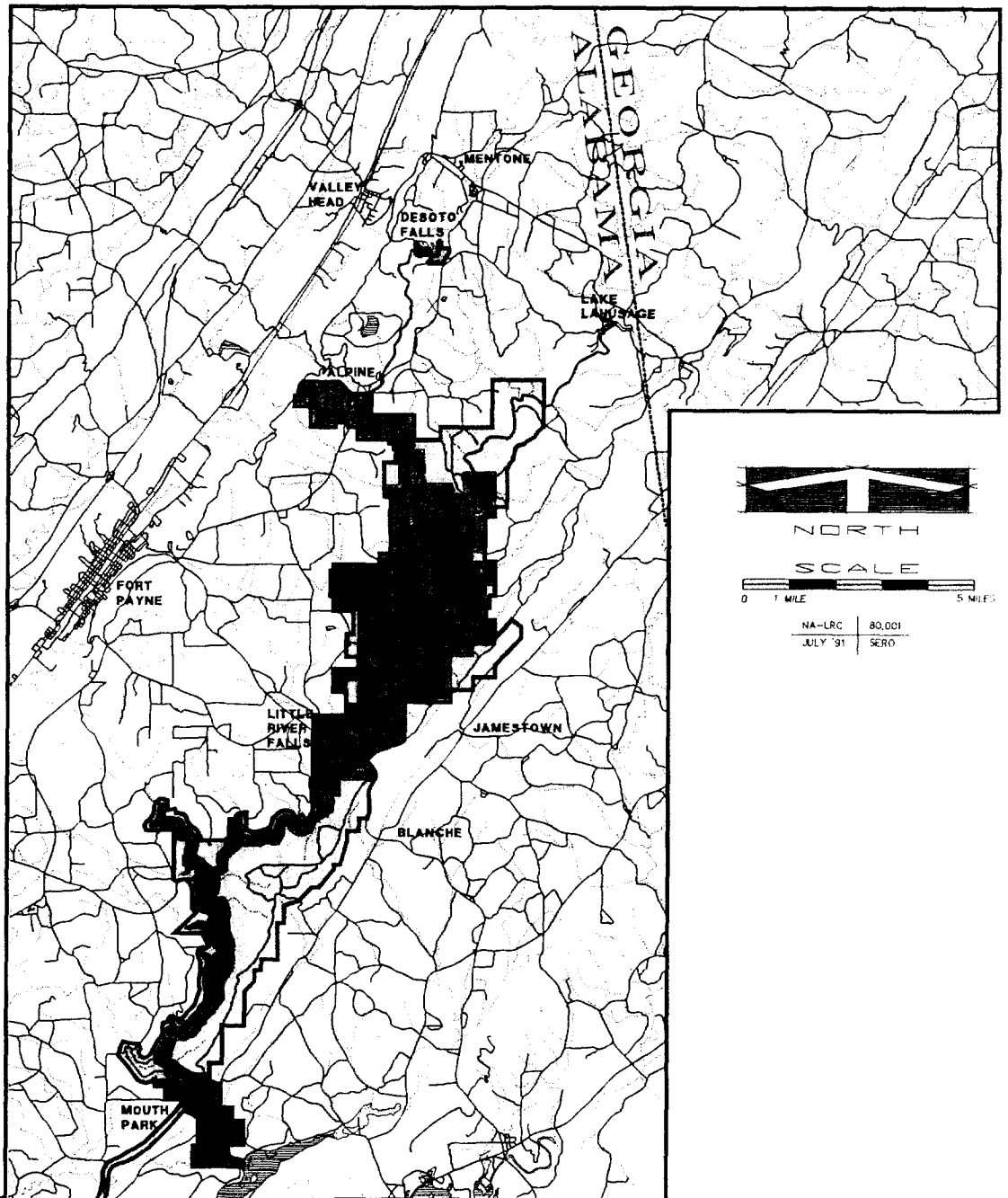
LEGEND

ALTERNATIVE A 

ALTERNATIVE B 

Streams 

Roads 

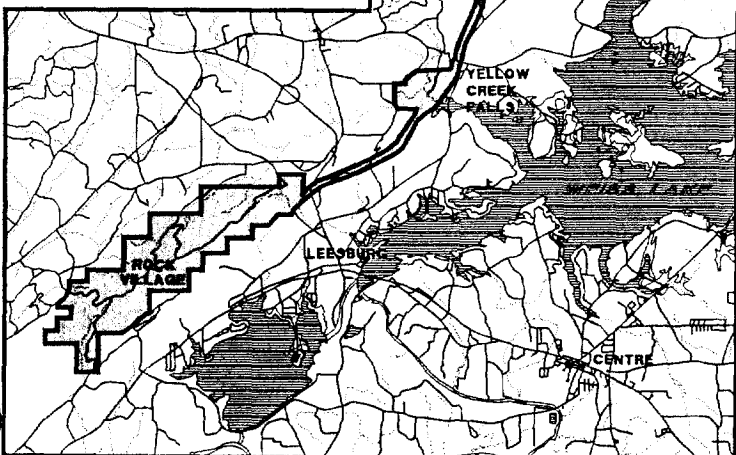


NORTH

SCALE

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NA-LRC 80,001
JULY '91 SERO



LITTLE RIVER CANYON
ALTERNATIVES MAP

ON MICROFILM

ALTERNATIVES FOR PROTECTING THE RESOURCES

SUMMARY OF THE FOUR ALTERNATIVES

Alternatives A and B are predicated upon a progressive building of concepts as to size and features to be preserved. Alternative C is related to a wild and scenic river evaluation for a narrow corridor along the river, together with small areas for administrative and management uses. Alternative D is one of "non-Federal ownership" action. Under Alternative D, State, local and private actions would protect the area.

Two basic management options were considered for Alternatives A and B: sole management by the Federal Government and cooperative management between the State of Alabama and the Federal Government. These options and possibly others would be more fully explored in the legislative review process.

Sole Federal management would require deeding of the DeSoto State Park lands within the envisioned boundary to the Federal Government, and the subsequent management of the park as a unit of the National Park System.

Even if an area is nationally significant, suitable, and feasible, it may not be recommended as a unit of the National Park System if it can be managed and protected adequately by other Federal agencies, State and local governments, or the private sector.

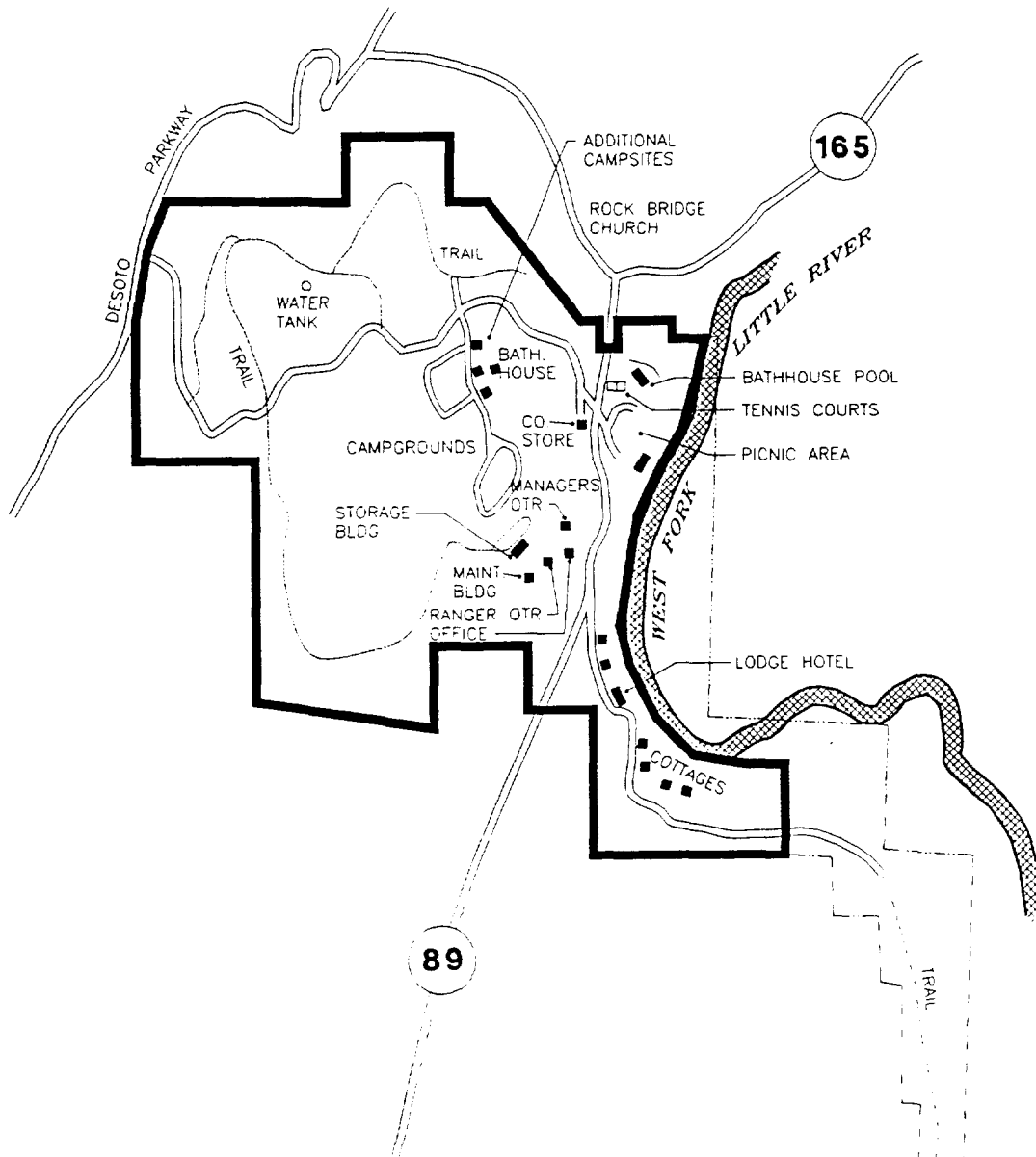
A cooperative management option provides an opportunity to address the interests of both the National Park Service and the State of Alabama. Numerous comments were received during the study process expressing the hope that DeSoto State Park not lose its identity. There is a great deal of pride associated with the image of the State Park System and the leadership associated with the operation of DeSoto State Park which has developed over the years. Under this concept the National Park Service could serve as the principal land manager with the State retaining title to some or all its lands. Management agreements could be developed with the State Park System for the management of the intensely developed recreational facilities of the resort/motel/cabin operations on the northern end of DeSoto State Park as well as their DeSoto Falls unit. This management concept would allow the Alabama State Parks to retain its employees and would allow the continuity of its daily operations as is currently being done, while reducing the Federal Government's administrative and development costs.

It is anticipated that the lodge, cabins, cottages, campgrounds, swimming pool, residence, office and other facilities delineated within the boundaries of the park on the accompanying map would be operated by the 35 people now employed at the park.

Should the area become a new unit of the National Park System, a Land Protection Plan will be formulated which will consider carefully the protection of lands within and adjacent to the boundaries selected for the park.



DESOTO FALLS
NATURE TRAILS &
OVERLOOK



DESOTO STATE PARK RECREATIONAL FACILITIES

LITTLE RIVER CANYON
MOUTH PARK



ALTERNATIVE A - THE PRIMARY RESOURCE

Location and Configuration - Alternative A focuses on the primary resources of the Little River and a portion of its east and west forks. This 15,000-acre park extends northward from Weiss Lake along the Little River through a rather narrow corridor until it begins to widen just below the Alabama State Highway 35 bridge. The corridor again becomes narrow at the confluence of the east and west forks of the Little River. Approximately 2.5 miles of the east fork is included within the envisioned unit. Along the west fork, the unit extends in a northwesterly direction through a rather narrow corridor to DeSoto State Park and includes the resort area, campground and other recreation facilities. DeSoto Falls is included as a detached unit to the north of the resort facilities.

Size - Approximately 15,000 acres (includes 5,000 acres of State lands)

Resource values - Alternative A includes the primary attributes of the study area. These values have been identified as the unique geologic river/canyon complex, regionally significant historical themes, unique vistas, and regionally significant recreational opportunities. These values are located in the river, the canyon, the rim areas of the canyon, and the accompanying land which provides protection to federally listed endangered species, and space for unit administration.

Visitor Experience - The primary visitor experience within Alternative A centers around the various means of experiencing the unique canyon resources at Little River. Whether through biking, auto touring, hiking, rafting or kayaking, the enjoyment of the canyon is the fundamental adventure in the region. Major emphasis in the visitor experience would include historic and nature interpretation, and regionally unique recreational experiences--rafting and kayaking.

Present land Use - The majority of the land is undeveloped. The few developed portions include the State park, timberlands, seasonal homes and the wildlife management area.

Development - Projected future development in the area includes:

- Hiking trails
- River access sites with parking and rest rooms
- Scenic overlook development
- Administrative headquarters (adaptive reuse)
- Maintenance area (adaptive reuse)
- Historic preservation and interpretive sites
- Basic utility development - water, sanitation, safety.

Costs

Acquisition	\$9 million (gross estimate, required projections being developed)
Development	\$3.9 million
Operation	(year 2,000) \$1.8 to \$2.2 million in 1991 dollars

Management

The principal owner/manager would be a Federal agency. Management of the current DeSoto State Park facilities could remain with the State. Potential cooperative management on public utility lands would be explored.

ALTERNATIVE B - THE COMPLETE COMPLEX

Location and Configuration - Alternative B targets all of the primary lands described in Alternative A, together with additional lands on the periphery of Alternative A. These additional lands would preserve additional watershed and scenic vistas, together with recreational lands for hunting, fishing, camping, and biking. Alternative B includes approximately 34,000 acres of lands beginning at Huff Gap about 10 miles south of the Little River community. It includes a lower unit (Cherokee Rock Village), an intermediate unit (Yellow Creek Falls), and the narrow TAG Rail Line which connects the two units with the Little River Canyon near Little River Canyon Mouth Park at the Little River community.

Size - Approximately 34,000 acres (includes 5,000 acres of State lands)

Resource Values - Alternative B includes all of the values of Alternative A plus the values of State endangered species; major camping sites and associated hiking and horseback riding areas; additional scenic vistas; greater watershed protection; increased rock climbing opportunities; and increased hunting areas.

Visitor Experience - In addition to all of Alternative A experiences, the visitor would be afforded all of the recreational opportunities enumerated in the aforementioned Resource Values.

Present Land Use - The majority of the land is undeveloped. In addition to the uses listed in Alternative A, the land areas in the Canyon unit consist of small farms, seasonal homes, and a few year-round residences.

The Yellow Creek unit includes a portion of the TAG Rail Line and five residences.

The Cherokee Rock Village unit is largely undeveloped but does contain one residence, a radio tower, a utility corridor across its northernmost portion, and undeveloped second growth forest land.

The TAG Rail Line bed is in an abandoned state.

Development - All of Alternative A plus:

- Camping
- Scenic overlooks
- Horseback riding facilities
- Parking areas
- Sanitary facilities
- Ranger station
- Interpretive structures
- Trail and bike path development (including 9 miles of the TAG Rail Line)

Costs

Acquisition	\$29.0 million (gross estimate, required projections being developed)
Development	\$5.6 million
Operation	(year 2,000) \$1.8 to \$2.2 million in 1991 dollars

Management - Same as Alternative A

ALTERNATIVE C - WILD AND SCENIC RIVER CONSIDERATIONS

Wild and Scenic River Considerations

As an adjunct to this special resources study, the values of the Little River and its potential as a National Wild and Scenic River came into focus. Primary among the considerations were the assessment of the potential influence that such designation might have on the upper reaches of the river, especially with regard to protecting the water quality of the stream as a whole and to fulfilling other vital conservation purposes. Independent designation as a National Wild and Scenic River, along with designation envisioned in Alternatives A and B, was seen as having merit. Designation as a Wild and Scenic River would be useful in protecting the river beyond the boundaries of Alternatives A or B, especially into the headwaters of the stream and its tributaries. Designation strictly as a Wild and Scenic River would not fully represent the diversity of resources and recreational activities and opportunities that this area furnishes.

Background

In 1968, the Congress recognized the value of rivers and their environs as outstanding natural treasures in need of protection by passage of Public Law 90-542, the National Wild and Scenic Rivers Act. The Act states that in order for a river to be eligible for designation, it must be free flowing and must possess one or more outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values. The Act further requires that the river evaluation indicate the appropriate classification should the river be designated. Rivers are classified as either wild, scenic, or recreational depending on the river's degree of naturalness. The classification categories are defined as follows:

Wild river areas--those rivers or sections of rivers that are free of impoundment and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.

Scenic river areas--those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

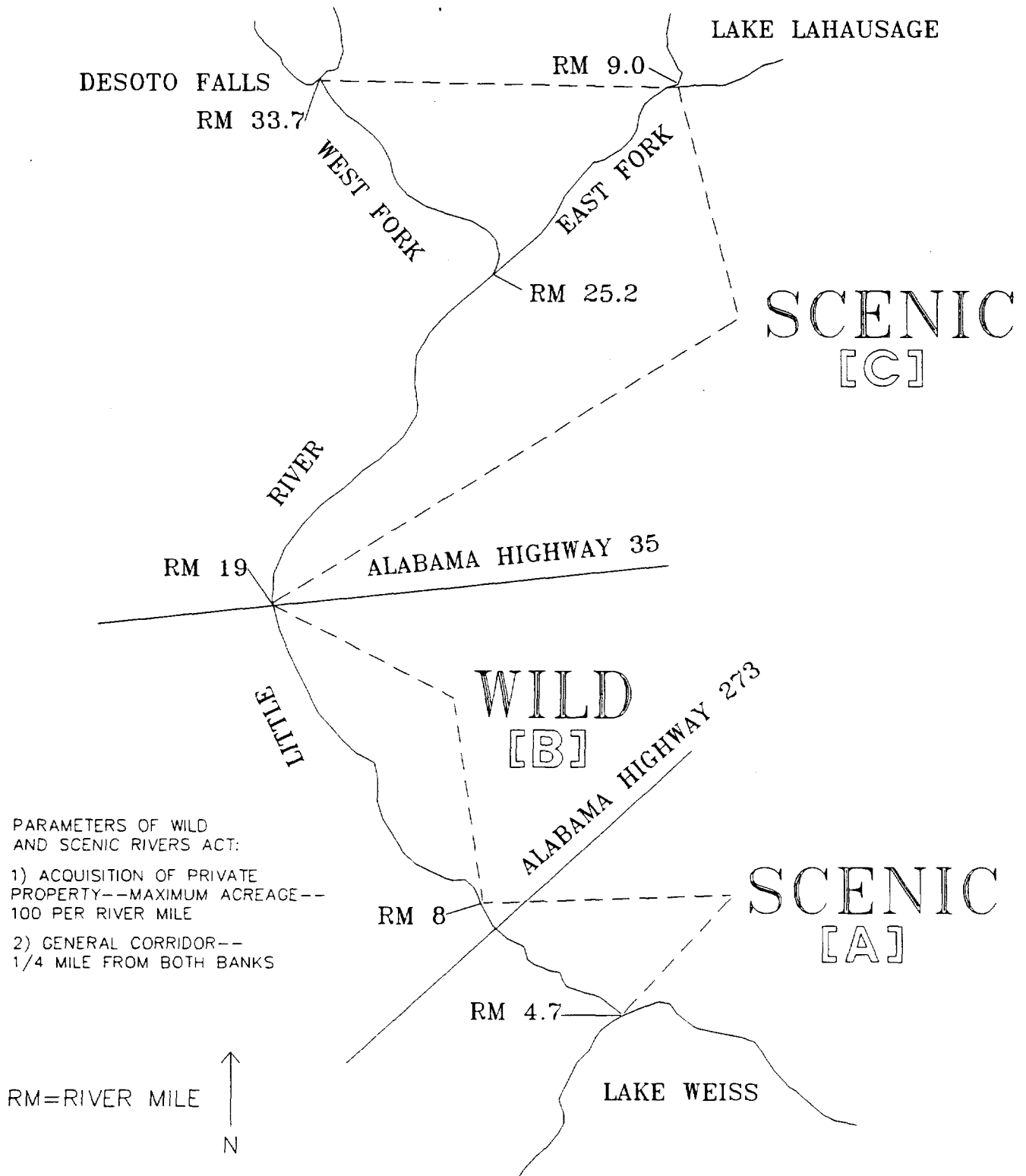
Recreational river areas--those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shoreline, and that may have undergone some impoundment or diversion in the past.

Designation as State Wild and Scenic River

While Alabama has more than 12,000 miles of rivers, the number which are free-flowing has diminished considerably over the years. All of Alabama's major river systems have impoundments, either for hydroelectric generation or navigation control. Relatively few rivers remain free-flowing; however, several including the Little River have been considered for inclusion under the National Wild and Scenic Rivers Act. However, they have not been included in the Wild and Scenic River System.

The Little River has many characteristics that recommend it for the Wild, Scenic, and Recreational Rivers program, and there has been widespread support for its inclusion. The river is regarded by many as one of the most beautiful and interesting rivers in the southeast.

ALTERNATIVE C WILD AND SCENIC RIVER CONSIDERATION



Little River and the associated Little River Canyon area are of such natural and scenic quality that the Alabama Legislature in the 1969 Regular Session designated Little River from south of Alabama State Highway 35 bridge to the mouth of the Canyon as a State Wild and Scenic River (Act No. 465 included in the Appendix).

Eligibility

Little River is unique in being one of the few rivers that forms and flows for almost all of its length on top of a mountain. It is also well known because it flows through Little River Canyon, a 700-foot deep gorge approximately 12 miles long.

Little River is formed from its east and west forks. The east fork forms in Georgia, joins the middle fork and flows out of Lake Lahusage near Mentone, Alabama. The west fork forms in Georgia, flows down into Alabama, drops over DeSoto Falls, and joins with the east fork to form the Little River about 9 river miles below Lake Lahusage. The river then flows about 7 river miles to Little River Falls just below the Alabama State Highway 35 bridge. This falls marks the beginning of the canyon.

Approximately 38 miles of the Little River and its east and west forks were found to be eligible for national wild and scenic river designation. This includes the following river segments:

1. Little River from Lake Weiss to the east and west fork confluence (approximately 20 miles).
2. East fork from the confluence with the west fork to Lake Lahusage (approximately 9 miles).
3. West fork from the confluence with the east fork to DeSoto Falls (approximately 9 miles).

The Little River's "outstanding remarkable" values are displayed on the accompanying evaluation matrix. Also provided are explanations of the scenic and recreational values.

WILD AND SCENIC RIVER CONSIDERATION EVALUATION MATRIX OF OUTSTANDING VALUES

LITTLE RIVER, ALABAMA

<u>VALUE</u>	<u>MINIMAL</u>	<u>COMMON</u>	<u>DISTINCTIVE</u>
SCENIC			
Landform	- Little variety	- Not unusual	X Complex, unusual
Rock Features	- Lacking	- Not unusual	X Unusual color, size, etc.
Vegetative Cover	- Homogeneous	- Some diversity	X Many natural patterns
Stream Aesthetics	- Flow distracts	- Flow sustains	X Flow greatly enhances
Manmade Structures	- Distractive	- Noticeable	X Unimposing
Degree of Relief	- Minimum	- Moderate	X Large
Clarity of Water	- Unclear, constant	- Seasonally turbid	X Mostly clear
Water Falls	- Lacking	- Small, unimpressive	X Frequent, imposing
RECREATIONAL			
Swimming/Picnicking	- Undesirable	X Dispersed, low use	- Concentrated, high use
Fishery Use	- Lacking	X Dispersed, low use	- Concentrated, high use
Length of Season	- Sporadic	1-2 seasons	X 3-4 seasons
Wildlife Viewing	- Few opportunities	X Expected species	Unusual species, high variety
Class/Difficulty	- Beginner (I-III)	- Intermediate (II-IV)	X Difficult (I-VI)
GEOLOGIC			
Geologic Formation	- Unexposed	- Opportunity for study	X Encourages study
Caves	- None identified	- Present, typical	X Present, unique
FISH & WILDLIFE			
Species diversity	- Small variety	X Mod. variety, typical, expected	- Exceptional variety
Species Uniqueness/Importance	- Ubiquitous species	- Typical native species	X Unique (T & E & P)
Habitat Uniqueness/Quality	- Ecosystem degraded, mundane	X Typical, representative	- Unique in occurrence/quality
HISTORICAL & CULTURAL			
Nat'l Register Sites	- Unlikely	X Unsurveyed/potential	- Present/nominated
Preserved Sites	- Unlikely	X Unsurveyed/potential	- Present
FLORA/BOTANIC FEATURES			
Species Diversity	- Small variety	- Mod. variety, typical, expected	X Exceptional variety
Species Uniqueness/Importance	- Ubiquitous species	- Typical native species	X Unique (T & E & P)
Habitat Uniqueness/Quality	- Ecosystem degraded, mundane	- Typical, representative	X Unique in occurrence/quality

Scenic - From the rugged canyon walls through the forested Little River Wildlife Management Area, the Little River offers a remote, sometimes wilderness setting. Manmade intrusions within the corridor are sparse and widely scattered. The frequent rock outcroppings, waterfalls and varied hardwood and evergreen forests provide an exceptional variety of experiences and aesthetic impressions for the river user. The river's emerald water is of exceptional purity and clarity. The State of Alabama recognized the Little River's outstanding values when in 1969 the State Legislature passed a joint resolution, Alabama Act No. 465, designating it a State Wild and Scenic River.

Recreational - Recreational use of the riverine environment is high and is supported by the Wildlife Management Area lands, DeSoto State Park and numerous private camps and resorts. Hiking, camping, fishing, hunting, sightseeing, rock climbing, and boating are popular activities within the Little River corridor. The variety and quality of recreational experiences within the corridor are enjoyed year-round. The river's floatability classifications range from Class I through Class VI in difficulty. A letter from Mr. Kent Ford, Whitewater World Champion and longtime member of the United States Olympic Team, made the following statement:

"I have had the opportunity to paddle over 200 rivers in 17 different countries around the world. Of all these rivers I have five favorites: the Pacuare in Costa Rica, the Varsog in Tadjikistan Soviet Union, the Grand Canyon of Arizona, the Santa Maria in Mexico, and the Gorge of the Verdon, in France.

Now I will have to refer to six favorites, as the Little River Canyon unquestionably meets my criteria. My favorite rivers all have spectacular scenery that threatens to distract a paddler from the whitewater, and captivating rapids that enhance the scenery."

River Classification

Evaluation of the river corridor and its characteristics resulted in the following classifications:

A. **Scenic** - Three and three-tenths miles from Lake Weiss to 1 mile above the Alabama Highway 273 bridge (approximately 3 miles). This section of the river is free of impoundment with the shoreline largely undeveloped.

There is access to the river at the Alabama Highway 273 bridge. In addition, there is minor development and an abandoned railroad bridge in this vicinity.

B. **Wild** - From 1 mile above the Alabama Highway 273 bridge to the Alabama State Highway 35 bridge (approximately 11 miles). This section of the river includes the Little River Canyon and for the most part is entirely shielded from the outside world by the canyon's rugged walls. This section is free from impoundment and generally inaccessible except by trail. The only intrusions in this section are the remains of the now defunct Canyonland Park and chair lift (a private tourist attraction) and the Canyonland Parkway or rim road which runs from the Alabama State Highway 35 bridge to Little River Canyon Mouth Park along the western canyon rim. Although the parkway has frequent vistas, turnouts and picnic areas, none of this development can be seen or heard by a river user in the canyon hundreds of feet below. The canyon's shoreline in this segment is totally wild and primitive. The river's waters and the tributaries tumbling over the canyon wall are unpolluted.

C. **Scenic** - From the Alabama State Highway 35 bridge to DeSoto Falls on the west fork and the east fork from its confluence with the west fork to Lake Lahusage (approximately 24 miles). This section has relatively few intrusions as it passes through DeSoto State Park and several private camp developments. The east fork section is unusually free of manmade intrusions. Surrounding land use is primarily forest lands and some agricultural or crop lands within the

corridor but mostly beyond the view of river users. This section runs through a rocky valley with an extremely rocky river bottom. There are many exposed boulders along the riverbanks and several scenic bluffs. For the most part, the river users see low wooded hills as they float through this section.

Suitability

In addition to a river's eligibility, it must also be deemed suitable to become a component of the System. In determining suitability, factors considered are: extent of public lands in the river area; costs required for acquisition, development, management, and operation; public, local or State interest in acting to protect and manage the river; and feasibility and timeliness of the action. For the purposes of the Little River study area, NO investigation of the river's suitability for national wild and scenic river status has been made.

ALTERNATIVE D - NON-FEDERAL OWNERSHIP

Under this alternative, a Federal unit would not be established in the Little River area. Other actions could take place to enhance the natural, cultural and recreational resources without direct Federal ownership. The State of Alabama could expand the boundaries of DeSoto State Park to include all or portions of the areas under Alternatives A and B, thereby extending public use and resource protection to many thousands more acres than the present configuration of the State park. Municipal or county governments in the vicinity could establish their own system of regional parks along the Little River. Both State and local governments could apply for Land and Water Conservation Fund monetary assistance for the acquisition and development of recreation areas.

Local governments could initiate land management actions, such as zoning, setbacks, and performance standards, that could result in improved water quality and the protection of the area's scenic values. Both State and local governments could call on the assistance of locally based or national conservation organizations to support these objectives. The National Park Service, too, through its Rivers and Trails Conservation Assistance Program, could provide planning and technical assistance to State, local agencies and private interest to protect the rivers, trails and greenway corridors, expand recreational opportunities and build institutional capability for conservation.

To overcome the lack of zoning in the corridor areas, cooperative management agreements may be a useful tool to maintain the integrity of the lands, waters, flora, and fauna in the corridors. These agreements between landowners and interested parties range from informal to detailed contracts. Nearly all voluntary land and historic preservation programs have agreements with property owners to maintain the integrity of their lands and structures. In return, Federal agencies provide technical assistance and management recommendations for maintaining all enhancing natural and historic features. The landowners maintain possession of their lands while the agencies protect and improve habitats. An example of this type of cooperation is the agreement between the U.S. Fish and Wildlife Service and landowners for the protection of the Green Pitcher Plant in the Little River corridor.

Through the interaction of Federal technical assistance, State and local acquisition, and adoption and enforcement of clean water and appropriate zoning mechanisms, important natural resources could be protected for years to come. Strong citizen support will be critical.

ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT

The Little River Canyon area is located in northeast Alabama in Cherokee, DeKalb and Etowah counties (see regional location map). The Special Resource was directed by the National Park Service Appropriation Bill of 1989. Purpose of the study is to provide information to assist in a decision concerning appropriate action to protect and provide for the public enjoyment of the area's resources. The study area is comprised mostly of natural areas with little evidence of intrusion by man. Numerous waterfalls, overlooks, and a 700-foot deep canyon that is a half mile wide comprise the study area.

In the process of completing the study, and to facilitate public involvement, newsletters were sent out on three separate occasions. Additionally, the National Park Service conducted two public meetings in the area of the envisioned park. In addition, there was extensive coordination with public agencies and contact with interested individuals. The major issue identified was a concern about Federal acquisition of private lands.

This environmental assessment describes a range of alternatives that have been developed to protect the resources of the area, to provide for the public's enjoyment and recreational use of the area, and to assess the impacts of implementing alternatives.

AFFECTED ENVIRONMENT

As previously described, the Little River Canyon area possesses outstanding natural, scenic, recreational and cultural values. Because of the unique geological and biological qualities, the area also is of considerable value for scientific study. The inherent beauty of the area has attracted many people into purchasing lots on the canyon rim and surrounding areas, with the intent that they will later build summer cottages and retirement homes.

The land adjacent to the Little River Canyon is currently utilized primarily for recreational purposes. The west side of the study area contains the 5,000-acre DeSoto State Park. Some farms, seasonal homes and a few permanent residences are found in this area. The eastern portion of the study area is dominated by the Little River Wildlife Management Area owned primarily by Alabama Power Company and managed by the State. Several seasonal homes also are located in this area. Some of the privately held land has been subdivided and is being marketed for additional home sites.

Both the Yellow Creek and the Cherokee Rock Village study areas have been broken into small tracts with various ownerships ranging from individuals to corporate partnerships. As both the Yellow Creek and Cherokee Rock Village areas are relatively underdeveloped, it is assumed and observed that the primary purposes of the tracts are recreational, timbering, and land speculation.

DeSoto State Park together with its DeSoto Falls unit is in the northern sector of the study area. Both are managed for tourism by the State of Alabama. In addition, numerous private summer homes, camps for children, and the Comer Boy Scout Reservation occur along much of the headwaters of the canyon outside the northern end of the study area. The village of Mentone, outside the north end of the study area, is a well-known tourist resort.

Above the study area and bordering the upper stretches of the river are a mixture of operating and abandoned farms with little other agriculture. Reclaimed strip mines are found along the northern section of the East Fork and at Yellow Creek.

DeSoto Scout Trail runs along Little River from the Comer Boy Scout Reservation to a point near the Alabama State Highway 35 bridge. Portions of the trail are frequently used by four-wheelers (four-wheel motorcycles).

Two areas of special concern are the possible future improvement of Alabama State Highway 35 through the area and five dams on the two major river tributaries at the north of the study area. Should Alabama State Highway 35 be converted to a limited access highway through the area, and the area is designated under management of the National Park System or other governmental entity, planning needs to assure that there is no feasible alternative and that all means to minimize adverse impacts have been considered for the road improvement and relocation in the study area. The Memphis to Atlanta connector route has yet to be determined. These concerns could be addressed by providing for the highway in legislation for a national area.

Excessive rainfall or the breaching of dams could result in flash flood conditions. Five dams are located in areas outside the proposed area but drain into the area. Public recreational use cannot occur in the flash flood areas of these dams should it be determined that these dams do not meet safety requirements. If the dams meet safety requirements, early warning systems will be implemented to ensure safety and to avoid any unnecessary loss of life or property.

DESCRIPTION OF ALTERNATIVE (No Preferred Alternative)

Alternative A (The Primary Resource)

GENERAL

Alternative A will encompass approximately 15,000 acres of which 5,000 are presently State lands. Areas in this alternative include: the canyon, the wildlife management area, the present DeSoto State Park (including DeSoto Falls unit).

Proposed development for this alternative will include: hiking trails, river access sites, overlook development, administrative headquarters (adaptive reuse), a maintenance area (adaptive use), historical preservation & interpretive sites, utilities, and sanitation facilities. A more detailed breakdown of the development follows.

DEVELOPMENT COSTS--ALTERNATIVE A

Visitor Center--2,500 sq. ft @ \$300/sq. ft	\$ 750,000
Maintenance Center--800 sq. ft. @ \$175/sq. ft	140,000
Parking	
River accesses 4 x 15 = 60 cars	
Visitor Center = 100 cars	
Canyon Mouth Park = 60 cars	
220 x \$2,000	440,000
Entrance Road--2,125 linear ft. @ 22-ft wide	302,000
Trails, Paved--2,000 linear ft. @ 6 ft wide	40,000
Wayside Exhibits--(10 @ \$3,000)	30,000
Landscaping & Misc. Development--15% of Bldg	112,000
Signs--Entrance	50,000
- Information/Directional	30,000
Septic System	100,000
Sanitary Facilities	
(4 buildings--1 vault each @ \$40,000)	160,000
River Access Site Development--4 @ \$30,000	120,000
Overlook Development--7 @ \$10,000	70,000
Utilities	25,000
Historic Preservation and Interpretive Sites	<u>152,000</u>
Net Construction costs	\$2,521,000
Gross Amounts (+56 percent)	3,932,000
RD	\$3.9 million

Alternative B (The Complete Complex)

General

Alternative B includes approximately 34,000 acres, of which 5,000 are presently State lands, and a portion of the TAG Rail Line bed. Areas in this alternative include all land included in Alternative A plus: approximately 500 acres surrounding Yellow Creek Falls, approximately 3,850 acres surrounding the Cherokee Rock Village area, and a corridor 100 feet wide along the TAG Rail Line running from approximately Little River Canyon Mouth Park to the northeastern portion of the Cherokee Rock Village unit.

Development included in this alternative will include all development occurring in Alternative A plus: Camping, scenic overlooks, parking, horseback riding, sanitary facilities, ranger station, interpretive structures, trail and bike path including TAG Rail Line (minor pedestrian bridges). A more detailed breakdown of development for this alternative follows.

DEVELOPMENT COSTS--ALTERNATIVE B

All of Alternative A plus the following:	\$2,521,000
Camping--100 sites with vehicle access	250,000
Scenic Overlooks--6 (350 sq. ft) @ \$15,000	90,000
Horseback Facilities--5 @ \$2,000	200,000
Sanitary Facilities--2 buildings--1 vault each	80,000
Ranger Station--625 sq. ft. @ \$300/sq. ft.	188,000
Interpretive Structures--2 @ \$3,000	6,000
Trail & Bike Path, including TAG Rail Line (Minor Pedestrian Bridges included)	<u>265,000</u>
Net Construction Costs	\$3,610,000
Gross Amounts (+56 percent)	\$5,631,000
RD	\$5.6 million

Alternative C (Wild and Scenic River Considerations)

General

Designation would extend protection to 38 miles of the river. Designation would prevent impoundments of the river. A maximum of 100 acres per mile on both sides of the river would equal the maximum acquisition allowed by law for this alternative. Approximately 28.6 miles of river passes through privately owned land. Another 10 miles of river runs through land owned by the State of Alabama.

A detailed breakdown of the envisioned development for this alternative follows:

DEVELOPMENT COSTS--ALTERNATIVE C

Visitor contact Station	
1,200 sq. ft. @ \$300/sq. ft.	\$360,000
Parking (Visitor Center = 50,	
River Access 4x15 = 60) 110 x 2000	220,000
Craft Put-in 4 @ \$30,000	120,000
Overlooks	125,000
Campsites--Primitive	
(40 sites with vehicle access) @ \$25,000	100,000
Picnic Sites -	
(10 sites each, 4 locations) @ \$10,000	40,000
Trails--Hiking	50,000
Sanitary Facilities	
(4 buildings--1 vault each @ \$40,000)	<u>160,000</u>
 Net Construction costs	 \$1,175,000
 Gross Amounts (+56 percent)	 \$1,833,000
 RD	 \$1.8 million

Alternative D (No Action Alternative)

General

This alternative would involve no Federal acquisition.

No action would be taken at the Federal level to protect these resources.

ENVIRONMENTAL CONSEQUENCES

The National Park Service has determined that laws which are applicable to this envisioned area and need to be evaluated are: The National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Clean Water Act, Clean Air Act, Fish and Wildlife Coordination Act, Executive Orders 11998 and 11990, Farmland Protection Policy Act, Architectural Barriers Act, and the Comprehensive Environmental Responses, Compensation and Liability Act. A brief explanation of each Act follows this assessment.

In compliance with the National Environmental Policy Act, the National Park Service has prepared this Environmental Assessment. To comply with Nation Environmental Policy Act, the National Park Service has determined the following to be the impacts of alternatives proposed in this study.

Alternatives A, B and C would have a positive economic impact on the local economy. National designation would bring national attention to the area and would result in an increase in visitation. The result of this is that more money will go into the local economy. Wages from park staff would be an additional boost to the economy. Construction, though limited, for all alternatives would utilize local contractors, if available, resulting in more jobs for the area. Development costs of Alternative A will be \$3.9 million dollars; development costs for Alternative B will be \$5.6 million dollars; and development costs for Alternative C will be \$1.8 million dollars. It is anticipated that a large amount of this will go into the local economy. The dollars will result in stimulating local spending to the extent that indirect benefits will be from two to three times greater in the local economy. In today's dollars, for instance, Alternative A construction should stimulate the local economy by adding from \$7.8 million to \$11.7 million to the economy; Alternative B should add from \$11.2 million to \$16.8 million and Alternative C construction should add from \$3.6 to \$5.4 million into the economy.

It is anticipated that the envisioned area would begin with a small staff and would, by the year 2000 employ from 40 to 45 people with a payroll of from \$1.8 to \$2.2 million. This would go into the local economy and would be multiplied by indirect benefits of \$2.6 to \$4.4 million.

The most appropriate way to determine the economic impact of the recreation user is to compare the area to other similar areas. In Montana, an estimated 75,000 visitors to the upper Missouri Wild and Scenic River contributed \$750,000 annually to the economy of the area around the corridor in 1977.

The Gauley River is a high quality whitewater rafting and kayaking resource in West Virginia. The area generated almost \$20 million dollars to the local economy. Each \$1 spent per visitor day generated an average of 1.79 days of employment and \$2.27 of sales. On North Carolina's Nantahala River the area generated \$1.8 million in expenditures in the State.

Based on the type of recreational activities available at the envisioned area, it can be concluded that per day, per person visit costs would be less than for the average tourist established at \$65 a day. It is estimated that each recreation day visit will cost \$25 a day and by the year 2000 it would be estimated that this cost would increase to \$35 a day. It is also estimated that National designation of the area as with Alternatives A, B and C will result in increased visitation of approximately 500,000 a year by the year 2000. This would result in \$17,500,000 a year into the economy.

Any relocations which should result from establishment of the area would have an adverse impact on those families which must be relocated. The impact on those living within the area selected for a park, who must be displaced, would be lessened under the provisions of Public Law 91-646 which provides for relocations assistance. Help would be available through the

relocations assistance officer in the Southeast Regional Office of the National Park Service, if the Federal Government were involved in the acquisition of lands.

The "No Action" Alternative is unlikely to provide any significant economic impacts in the area.

Designation of the area as proposed under Alternatives A, B, and C should have no significant affect on the recreational activities and uses of the area; and, with the exception of increased seasonal visitors, only minor impacts on the social aspects of the area which currently exists.

Increased visitor use to the area could impact the infrastructure of the community relative to roads, traffic, accommodations, food services and various other required services which could result in adverse impacts to the environment. Impacts can be minimized if planned in anticipation of expected park visitation. A major influx of recreation users can draw polar opposite responses from the local communities. To lessen this impact, the National Park Service must remain sensitive to the issues and take them into account in any further planning. Future public involvement sessions will assist in alleviating many, but not all, concerns related to the project.

All alternatives except the "No Action" Alternative will require construction. This study does not identify site specific locations for construction and so specific site development cannot be evaluated. However, before any specific site locations are selected where construction is proposed, the topography of the area must be considered to select sites in areas where grading is minimal and cuts and fills are avoided or minimal. This is particularly relative to the proposed visitor center, maintenance center, entrance road and parking lots proposed in Alternatives A and B. Soil associations must be considered in selecting sites to help avoid erosion. Scenic views must be considered with development to minimize impacts on the area's scenic qualities. Vegetation must be evaluated to place development in areas where impacts of clearing and ground cover removal are minimal. Surveys must be completed which identify archeological sites as well as endangered and threatened species to assure protection of these sites. Where drainfields are necessary to accommodate sanitary facilities, adequate testing must be completed to assure proper filtering before the effluent enters into any stream or the river.

Construction of utility lines should be placed underground unless geological conditions indicate this is not feasible. These lines should follow existing or proposed roadways as nearly as possible to minimize aesthetic impacts.

Construction of the visitor center associated with Alternatives A and B will result in about an acre of land being cleared. Vegetation will be removed and some grading will be necessary. National Park Service will construct appropriate berms and other site specific protection devices to avoid erosion of the site. Construction of the maintenance center associated with Alternatives A and B and the ranger station called for in Alternative B will require a little more that one half an acre be cleared. At these sites as with the visitor center some grading is likely to occur and vegetation will be removed. Silt screens will be established to control erosion and at both the maintenance area and visitor center undeveloped sites will be revegetated with native vegetation to blend the sites into the environment as much as possible and to avoid any future erosion from development.

Parking lots will be constructed for all alternatives. This will result in removal of vegetation and possible grading. Berms will be utilized to control erosion. Parking lots for river accesses are likely to be located in the floodplain. They should not be paved but should consist of a permeable surface, such as pea gravel, which allows filtering and avoids runoff. Road and trail development will result in clearing, grading and compaction of soils. To prevent soil erosion berms should be constructed and native species planted to revegetate the sites to avoid future erosion. Roads and trails in floodplains should not be paved but must have permeable surfaces.

The horseback facilities proposed in Alternative B will require clearing and construction. Care must be taken in locating these facilities to avoid adversely impacting water quality. Sites should be selected where appropriate soils and other geologic conditions assure no contamination occurs to tributary streams or to the river. Consideration should be given to appropriate management of any animal waste which occurs at the sites.

All vegetation cleared for site development should be disposed of outside of the envisioned park at appropriate sites or may be burned on site if consistent with the State's air quality implementation plan. Should excess material be generated through grading, this material should be disposed of outside the envisioned area at approved locations.

In order to comply with the National Historic Preservation Act, the National Park Service coordinated with the Alabama State Historic Preservation Office. In consultation with the Alabama State Historic Preservation Office and based on National Park Service studies of the area, it has been determined that the area is rich with cultural sites, both historic and archeological. While several structures are listed on the National Register a full survey needs to be made of those structures that meet the criteria of eligibility to the National Register of Historic Places. No sites listed on the National Register will be impacted by any of the alternatives. A detailed archeological survey has not been done at this point. However, site specific archeological surveys may be done before construction in order to assure the protection of cultural resources.

Under the no action alternative much of the area is privately owned and there is a possibility that valuable cultural sites could be lost; however, public ownership will assure the protection of these sites. Should an alternative be implemented which requires National Park Service presence in the area, there will be further coordination with the Alabama State Historic Preservation Office and coordination with the Advisory Council on Historic Preservation as required under the National Historic Preservation Act to determine the impacts of specific plans for site developments.

To comply with the Endangered Species Act, the National Park Service coordinated with the U.S. Fish and Wildlife Service to identify endangered and threatened species as well as candidate species for listing on the Endangered and Threatened Species List. A number of species occur in the study area which are endangered and threatened. While development is proposed which could impact these species, it is feasible that this proposed development can be implemented without impacting these species. Since no specific sites have been identified for development, there is considerable flexibility in the selection for site development. Before any action is taken to identify alternative sites for development, a survey of species will be made in consultation with the U.S. Fish and Wildlife Service to avoid any impacts.

A "No Action" Alternative which will result in no public ownership could result in a negative impact on endangered species. There is no mandate on private landowners and developers to protect these species.

In compliance with the Clean Water Act, sampling in the river indicates that water quality is generally good. Nonetheless, the river and its tributaries experience pollution from time to time from agricultural development, from sewage of residential development and from animal raising. However, at this time, point and non-point runoff has not seriously impacted the water quality in the Little River.

Alternatives A, B, and C as well as the "No Action" Alternative should not affect the State's water quality standard designation for Little River and its tributaries within the study area. However, implementing Alternatives A, B, and C which involves a National Park Service presence will place the Service in a responsible position to assure that water quality is acceptable for recreation and conservation purposes and could avoid degradation of water quality

in the river. This could require the State and the National Park Service to work to improve water quality if, at some point, it is determined that the water quality is not suitable for protection of park resources and recreational use in the area.

Alternatives A, B, and C could result in expanding urban growth in the area producing possible increased threats to water quality. Steps need to be taken to assure that water quality is protected. Construction associated with Alternatives A, B, and C could result in siltation and erosion. To avoid this, the National Park Service will construct appropriate berms and other site specific protective devices to avoid construction impacts to the river. It is anticipated that rest rooms will have self-contained tanks and sewage will be disposed of at an approved site outside the area.

It is likely that the visitor center will have a septic system with field lines. Studies will need to be accomplished to determine percolation and filtration of the thin mountain soils before construction begins. Uncontrolled development of the area under a "No Action" Alternative could result in degradation of water quality. Under this alternative it will not be as likely that water quality degradation will be monitored and effectively dealt with as with Alternatives A, B, and C.

Designation under the State's Air Quality Implementation Plan will not be changed for any of the alternatives. No serious point source polluters have been identified in the area. Implementation of construction and operation under Alternatives A, B, and C should have no significant impact on air quality.

The National Park Service coordinated with the U.S. Fish and Wildlife Service concerning impacts that the project may have under the Fish and Wildlife Coordination Act. It is likely that construction associated with Alternatives A, B, and C will result in the removal of small amounts of habitat. Also increased visitation could impact habitats for some animals and plants. The National Park Service will revegetate construction sites with native vegetation and will monitor user impacts on resources. Limited construction and use should have only a short term impact on wildlife and plants. The abundance of habitat in the area together with the revegetation of construction sites will result in an insignificant impact under this act.

Floodplains and wetlands are located within the area. The location of floodplains has been identified, but there has been no delineation or inventory of wetlands. While no significant wetlands have been observed, it is assumed that there may be some areas in the lowlands near Weiss Lake and the river. Final site locations for development will avoid wetlands.

The National Park Service has determined that scenic overlooks, trails and camping facilities, including appropriate sanitary facilities needed to provide full utilization of recreational developments, are compatible with floodplain use. Floodproofing will be a consideration in their design. Also compatible are entrance, access and internal roads as well as small parking lots, historic and interpretive sites. The proposed administrative headquarters and maintenance areas are adaptive uses and are not located in floodplains. A site outside the floodplain and wetlands will be evaluated for a ranger station.

In complying with the Farmland Policy Protection Act, the study has been coordinated with the Soil Conservation Service. Prime and unique farmlands have been identified in the study area. Most of the prime farmlands in the Little River Canyon Study area are linked with two soil associations: the Hartsells-Rock Outcrop and the Hartsells-Linker-Hector.

The Hartsells-Rock Outcrop association is described as moderately deep, loamy soils found in residuum weathered from sandstone, common sandstone boulders, and rock outcrop. The areas are dominated by well drained steep soils on uplands. The Hartsells-Linker-Hector association is described as a moderately deep and shallow residuum weathered from sandstone. They are

found in areas dominated by excessively drained to moderately well drained, gently sloping to strongly sloping soils on uplands and stream terraces.

Generally these associations can be found around drainage heads, in shallow depressions, or foot slopes, at the base of slopes, and on colluvial and alluvial fans. Other areas conducive to prime farmlands in the area include: the floodplains and bottoms along streams, narrow and gently sloping ridge tops, moderately wide benches, and sandstone plateaus.

Soil erosion during development will be controlled by barriers and silt screens in drainage ways. Replanting of vegetation will be done as necessary.

Completion of the Farmland Conversion Impact Rating to determine specific impacts indicate that none of the alternatives will significantly impact prime and unique farmland.

In accord with the Architectural Barriers Act, all facilities, where feasible, will be accessible to the handicapped.

To identify hazardous waste the National Park Service has in consultation with the solid waste supervisor for DeKalb County completed a literature search of the history of the area which revealed that it is unlikely that any industry or business which produced or dealt with hazardous substances has been located in the area. Also initial on site reconnaissance of the area did not indicate that hazardous waste sites exist. However, some dumping of cars and household garbage has occurred in the area. Should any of the area be proposed for Federal land acquisition, a more detailed evaluation may be necessary.

CONCLUSION

The following chart indicates the status of compliance for this new area study. Should action be taken to have a National Park Service area in the Little River Canyon vicinity, further environmental evaluations will be necessary. These include additional archeological surveys, endangered species surveys, and identification of wetlands before any construction. A more detailed site-specific survey for hazardous waste should be undertaken if land is proposed for National Park Service management.

	Full Compliance	Partial Compliance X*	No Compliance
National Environmental Policy Act			
National Historic Preservation Act	X		
Endangered Species	X		
Clean Water Act	X		
Clean Air Act	X		
Fish and Wildlife Coordination Act	X		
Executive Orders 11998 and 11990	X		
Farmland Protection Policy Act	X		
Architectural Barriers Act	X		
Comprehensive Environmental Responses, Compensation and Liability Act	X		

*The project will be in full compliance upon approval of the Findings of No Significant Impact.

COORDINATION

Alabama Department of Conservation and Natural Resources
Alabama Department of Economic and Community Affairs
Alabama Division of State Parks
Alabama Forestry Commission
Alabama Historical Commission
Alabama Natural Heritage Program
Alabama Mountain Lakes Tourist Association
Alabama State Historic Preservation Officer
Birmingham Canoe Club
Canyon View Forest Property Owners Association
DeKalb County Solid Waste Supervisor
DeSoto State Park
East Alabama Regional Planning and Development Commission
Friends of Little River
Jacksonville State University
Lookout Mountain Parkway Association
Lookout Mountain Trail Association
National Speleological Society, Alabama Cave Survey
Rails to Trails Conservancy
Tennessee Valley Authority
The Alabama Conservancy
The Sierra Club
The Wilderness Society
Top of Alabama Regional Council of Governments
U.S. Department of Agriculture Soil Conservation Service
U.S. Department of Agriculture: The Alabama Cooperative Extension Service
U.S. Fish and Wildlife Service
U.S. Geological Survey
U.S. Public Health Service

COMPLIANCE WITH ENVIRONMENTAL LAWS

In evaluating the environmental impacts of the project, compliance with the following laws is necessary:

A. National Environmental Policy Act

The National Environmental Policy Act (NEPA) is our basic national charter for protection of the environment. It established policy, set goals and provided means for carrying out the policy. Section 102(2) contains action-forcing provisions to make sure that Federal agencies act according to the letter and spirit of the act. The regulations that follow implement Section 102(2).

NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before action is taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public review are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.

The NEPA process is intended to help public officials to: (1) make decisions that are based on understanding of environmental consequences; and (2) take actions that protect, restore, and enhance the environment.

In Section 102(2), the act states that Federal agencies must, to the fullest extent possible:

1. Interpret and administer the policies, regulations, and public laws of the United States in accordance with policies set forth in the act. Agencies must implement procedures to make the NEPA process more useful to decision makers and the public; to reduce paperwork and the accumulation of extraneous background data; and to emphasize the real environmental issues and alternatives. In addition, Environmental Impact Statements and Environmental Assessments must be concise, clear and to the point, and should be supported by evidence that agencies have made the necessary environmental analysis.
2. Integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively.
3. Involve the public in decisions which affect the quality of the human environment.
4. Identify and assess the reasonable alternative to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.
5. Indicate that, by all practicable means, consistent with the requirements of the act and other essential considerations of national policy, restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.

B. National Historic Preservation Act

Numerous laws affect the manner in which an agency carries out its mission. Of particular importance to this study is the National Historic Preservation Act of 1966 as amended, especially Sections 106 and 110(f) of the Act. Section 106 directs all Federal agencies to take into account the effect of their actions on historic properties and to afford the Advisory Council

on Historic Preservation an opportunity to comment on those actions and their effects. Section 110(f) mandates a higher standard of consideration than Section 106 for undertakings that may affect National Historic Landmarks directly and adversely.

C. Endangered or Threatened Species

Section 7 of the Endangered Species Act of 1973 requires that Federal agencies ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or modification of critical habitat of such species. Informal consultation with the U.S. Fish and Wildlife Service has been continuous throughout the planning process. Additional consultation will take place before any development plans are implemented.

The 1978 amendments to the Endangered Species Act require that a "biological assessment" (a site-specific and detailed evaluation of effects on endangered or threatened species) be conducted prior to the construction or implementation of a Federal action which could impact threatened and endangered species.

Special management protection will be given to those plants and animals that are listed as endangered or threatened species. As management needs and strategies become identified through continuing research, specific management plans will be developed for some individual species. The National Park Service will consult with the U.S. Fish and Wildlife Service before implementing any action that may affect listed species.

D. Clean Water Act

The Clean Water Act (CWA), also known as the Federal Water Pollution Control Act Amendments, sets water quality standards and effluent limitations for stream water quality.

The CWA regulates sewage sludge, ocean dumping, and provides for wetland protection. Permits are required for all point sources from which pollutants are discharged to navigable waters. This permitting is done under the National Pollutant Discharge Elimination Program. The CWA authorizes the National Contingency Plan for the removal of oil and hazardous substances. This act also provides for grants for pollution control programs, research and development and provides funding for water treatment facilities. The act establishes standards for water quality.

E. Clean Air Act

This act is administered by the Environmental Protection Agency with State agency overseeing a State air quality plan. The act addresses and controls air pollution by setting air quality and emission limitations. It requires States to have uniform air quality laws and State implementation plans and sets standard of performance for new stationary sources. It establishes national standard for hazardous air pollutants and requires monitoring, record keeping, inspections and abatement of air pollution from Federal facilities. The act also addresses protection for the ozone; prevention of significant deterioration of air quality, which includes visibility protection for Federal Class I areas; requires plans for nonattainment areas; and sets emission standards for moving sources which includes motor vehicle emission and fuel standards.

F. Fish and Wildlife Coordination Act

Administered by the U.S. Fish and Wildlife Service, this act provides assistance to, and cooperation with, Federal, State and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat. Also it controls losses of the abundant species, in providing public shooting and fishing areas, including easement across public lands for access to these areas. The act also requires surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States. The act allows donations of land and contributions of funds. The act also requires review of projects involving alteration of a body of water.

G. Executive Orders 11988 and 11990--Floodplains and Wetlands Management

Executive Order 11988 states that each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impacts of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by the floodplains. Executive Order 11990, in like manner, calls for the preservation and enhancement of the natural and beneficial values of wetlands.

Executive Orders 11988 and 11990 provide an opportunity for early public review of any plans or proposals for new construction in floodplains and wetlands. The requirements outlined in the National Park Service Floodplain Management and Wetlands Protection Guidelines (45 FR 35916) affect the planning and compliance process for a proposed park unit.

Because of elevation and natural drainage patterns, a portion of the study area lies within the boundaries of the 100-year floodplain as determined by the National Flood Insurance Program. Each agency shall take floodplain management into account when formulating or evaluating any water and land use plans and shall require land and water resources use appropriate to the degree of hazard involved.

These areas are generally confined to the deeply incised canyons with flaring in the vicinity of Little River Canyon Mouth Park and the Little River community.

Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. There are areas in the lower drainage of the Little River just above its confluence with Weiss Lake that may be classified within the above categories.

H. Farmland Protection Policy Act

The Farmland Protection Policy Act is to be recognized as an element of environmental planning. This act is designed to take into account the impacts on prime agricultural farmlands. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and also is available for these uses. The land could be crop land, pastureland, range land, forest land, or other land but not urban built up land or water. The Act exempts from the definition of prime farm land that "already in or committed to urban development or water storage." The U.S. Department of Agriculture has determined that land "committed to urban development" includes any land designated for commercial, industrial, or residential use by a State or local government in an operational comprehensive land use plan or in a zoning code or ordinance.

I. Architectural Barriers Act

In accordance with the Architectural Barriers Act of 1968, as amended, the Rehabilitation Act of 1973, as amended (Section 504), and the Uniform Federal Accessibility Standards, the visitor and administrative facilities, services, and programs for the envisioned park will be made accessible to the highest level possible and feasible to persons with visual, hearing, mobility, and mental impairments.

National Park Service Special Population Coordinators and interested persons, including handicapped persons or organizations representing them, will be consulted in the development of plans related to the project. The coordinators and interested persons will remain involved in the development of more detailed plans, designs, and the interpretive media.

J. Comprehensive Environmental Responses, Compensation and Liability Act and Resource Conservation and Recovery Act

The principal hazardous waste law is the Comprehensive Environmental Responses, Compensation and Liability Act (CERCLA), often called "Superfund". This law is to control hazardous waste which has been improperly disposed. The other major hazardous waste law is the Resource Conservation and Recovery Act, which is intended to ensure the hazardous waste is properly treated, stored and disposed. CERCLA provides the means and authority for cleaning up past and present hazardous waste sites. The law seeks to clean up the hazardous waste immediately and minimize legal delays as much as possible to protect public health and the environment. The Superfund law creates a major potential for liability for landowners as a means of enforcing the proper disposal of hazardous waste.

The Environmental Assessment process will be completed with additional documentation (a Finding of No Significant Impact or an Environmental Impact Statement) when planning for facilities and visitor use continues, if a new park unit is authorized by Congress.

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**NATIONAL PARK PROPOSAL - 25-MEMBER COMMITTEE
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ESTABLISHED BY LITTLE RIVER CANYON ADVISORY COUNCIL
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APPENDICES



APPENDIX
FLORA AND FAUNA
VERTEBRATES OCCURRING ON LOOKOUT MOUNTAIN
(State Endangered List)

<u>Scientific Name</u>	<u>Common Name</u>	<u>Designation</u>
Notropis caeruleus*	Blue shiner	Special concern
Etheostoma trisella	Trispot darter	Poorly known
Masticophis flagellum flagellum	Eastern coachwhip	Special concern
Graptemys pulchra	Alabama map turtle	Special concern
Terrapene carolina spp	Box turtle	Special concern
Aneides aeneus	Green salamander	Poorly known
Desmognathus ochrophaeus	Mountain dusky salamander	Poorly known
Lampropeltis triangulum triangulum	Eastern milk snake	Poorly known
Pituophis melanoleucus	Northern pine snake	Poorly known
Myotis grisescens	Gray myotis	Endangered
Myotis sodalis	Indiana myotis	Endangered
Plecotus rafinesquii	Raffinesque's big- eared bat	Special concern

*Record from Little River in Canyon segment

MAMMALS

<u>Scientific Name</u>	<u>Common Name</u>
Didelphis marsupialis	Opossum
Sorex einereus	Masked shrew
Sorex longirostris	Southeastern shrew
Cryptotis parva	Least shrew
Blarina brevicauda	Short tail shrew
Scalopus aquaticus	Eastern mole
Myotis lucifugus	Little brown myotis
Myotis keeni	Keen myotis
Myotis grisescens	Gray myotis
Myotis austroriparius	Mississippi myotis
Myotis sodalis	Indiana myotis
Lasionycteris noctivagans	Silver-haired bat
Pipistrellus subflavus	Eastern pipistrel
Eptesicus fuscus	Big brown bat
Lasiurus borealis	Red bat
Lasiurus cinereus	Hoary bat
Lasiurus seminolus	Seminole bat
Nycticeius humeralis	Evening bat
Plecotus rafinesquei	Eastern big-eared bat
Tadarida brasiliensis	Mexican freetail bat
Ursus americanus	Black bear

MAMMALS (Continued)

<u>Scientific Name</u>	<u>Common Name</u>
<i>Procyon lotor</i>	Raccoon
<i>Mustela frenata</i>	Longtail weasel
<i>Mustela vison</i>	Mink
<i>Lutra canadensis</i>	River otter
<i>Spilogale putoris</i>	Spotted skunk
<i>Mephitis mephitis</i>	Striped skunk
<i>Canis latrans</i>	Coyote
<i>Urocyon cinereoargenteus</i>	Gray fox
<i>Lynx rufus</i>	Bobcat
<i>Marmota monax</i>	Groundhog
<i>Tamias striatus</i>	Eastern chipmunk
<i>Sciurus carolinensis</i>	Eastern, gray squirrel
<i>Sciurus niger</i>	Eastern fox squirrel
<i>Glaucomys volans</i>	Southern flying squirrel
<i>Castor canadensis</i>	Beaver
<i>Reithrodontomys humulis</i>	Eastern harvest mouse
<i>Peromyscus polionotus</i>	Oldfield mouse
<i>Peromyscus leucopus</i>	White-footed mouse
<i>Peromyscus gossypinus</i>	Cotton mouse
<i>Neotoma floridana</i>	Eastern woodrat
<i>Oryzomys palustris</i>	Rice rat
<i>Sigmodon hispidus</i>	Hispid cotton rat
<i>Pitymys pinetorum</i>	Pine vole
<i>Ondatra zibethica</i>	Muskrat
<i>Zapus hudsonius</i>	Meadow jumping mouse
<i>Napaeozapus insignis</i>	Woodland jumping mouse
<i>Sylvilagus floridanus</i>	Eastern cottontail
<i>Sylvilagus aquaticus</i>	Swamp rabbit
<i>Odocoileus virginianus</i>	Whitetail deer

REPTILES

Scientific Name

Chelydra serpentina serpentina
 Sterotherus odoratus
 Sterotherus minor reitfer
 Kinosternon subrubrum subrubrum
 Graptemys pulchra
 Graptemys geographica
 Chrysemys picta picta
 Chrysemys scripta elegans
 Chrysemys scripta scripta
 Terrapene carolina carolina
 Trionyx muticus calvatus

Spiniterus asperus

Anolis carolinensis carolinensis
 Sceloporus undulatus hyacinthinus
 Cnemidophorus sexlineatus sexlineatus
 Scincella lateralis
 Eumeces fasciatus
 Eumeces laticeps
 Eumeces inexpectatus

Ophisaurus ventralis
 Ophisaurus attenuatus longicaudus
 Nerodia sipedon pleuralis
 Nerodia sipedon sipedon
 Nerodia erythrogaster flavigaster
 Nerodia septemvittata
 Thamnophis sirtalis sirtalis
 Thamnophis sauritus sauritus
 Storeria dekayi wrightorum
 Virginia valeriae valeriae
 Virginia striatula
 Heterodon platyrhinos
 Diadophis punctatus edwardsi
 Carphopis amoenus amoenus
 Coluber constrictor constrictor
 Masticophis flagellum flagellum
 Opheodrys aestivus
 Pituophis melanoleucus melanoleucus
 Elaphe obsoleta spiloides
 Elaphe obsoleta obsoleta
 Elaphe guttata guttata
 Cemophora coccinea copei
 Lampropeltis triangulum elapsoides

Common Name

Common snapping turtle
 Stinkpot
 Stripe-neck musk turtle
 Eastern mud turtle
 Alabama map turtle
 Map turtle
 Eastern painted turtle
 Red-eared pond slider
 Yellow-bellied pond slider
 Eastern box turtle
 Gulf coast smooth softshell
 turtle
 Gulf coast spiny softshell
 turtle
 Green anole
 Northern fence lizard
 Six-lined race runner
 Ground skink
 Five-lined skink
 Broad-headed skink
 Southeastern five-lined
 skink
 Eastern glass lizard
 Eastern slenderglass lizard
 Midland water snake
 Northern water snake
 Yellow-bellied water snake
 Queen snake
 Eastern garter snake
 Eastern ribbon snake
 Midland brown snake
 Eastern smooth earthsnake
 Rough earth snake
 Eastern hognose snake
 Northern ringneck snake
 Eastern worm snake
 Northern black racer
 Eastern coachwhip
 Rough green snake
 Northern pine snake
 Gray rat snake
 Black rat snake
 Corn snake
 Northern scarlet snake
 Scarlet kingsnake

REPTILES (Continued)

Scientific Name

Lampropeltis triangulum triangulum

Lampropeltis getulus niger

Lampropeltis calligaster

rhombomaculata

Tantilla coronata

Agkistrodon piscivorus leucostoma

Agkistrodon contortrix mokasen

Crotalus horridus horridus

Common Name

Eastern milk snake

Black kingsnake

Mole snake

Southeastern crowned snake

Western cottonmouth

Northern copperhead

Timber rattlesnake

AMPHIBIANS

Scientific Name

Necturus maculosus maculosus
Notophthalmus viridescens viridescens
Ambystoma tigrinum trigrinum
Ambystoma maculatum
Ambystoma opacum
Desmognathus ochrophaeus
Desmognathus fuscus conanti
Desmognathus monticola
Plethodon glutinosus glutinosus
Plethodon dorsalis dorsalis
Hemidactylum scutatum
Aneides aeneus
Eurycea bislineata cirrigera

Eurycea lucifuga
Eurycea longicauda guttolineata
Scaphiopus holbrooki holbrooki
Gastrophryne carolinensis
Bufo americanus americanus
Bufo woodhousei fowleri
Acris crepitans crepitans
Hyla crucifer cruifer
Hyla gratiosa
Hyla versicolor
Hyla chrysoscelis
Pseudacris triseriata feriarum
Pseudacris brachyphona
Rana clamitans melanota
Rana catebeiana
Rana utricularia
Rana palustris

Common Name

Mud puppy
Red-spotted newt
Eastern tiger salamander
Spotted salamander
Marbled salamander
Mountain dusky salamander
Spotted dusky salamander
Seal salamander
Slimy salamander
Zigzag salamander
Four-toed salamander
Green salamander
Southern two-lined
salamander
Cave salamander
Three-lined salamader
Eastern spadefoot toad
Eastern narrow-mouthed toad
American toad
Fowler's toad
Northern cricket frog
Northern spring peeper
Barking trefrog
Gray tree frog
Gray tree frog
Upland chorus frog
Mountain chorus frog
Green frog
Bullfrog
Southern leopard frog
Pickeral frog

FISH

Scientific Name

Ichthyomyzon gagei
 Lampreta aepyptera
 Lampreta meridionale
 Esox niger
 Campostoma anomalum
 Hybopsis lineopunctata
 Notropis asperifrons
 Notropis baileyi
 Notropis caeruleus
 Notropis callistius
 Notropis chrosomus
 Notropis lirus
 Notropis stilbuis
 Notropis trichroistius
 Notropis volucellus volucellus
 Notropis xaenoccephalus
 Notropis zonistius
 Rhinichthys atratulus
 Phenacobius catostomus
 Pimephales vigilax
 Semotilus atromaculatus
 Ictalurus catus
 Ictalurus furcatus
 Ictalurus melas
 Ictalurus punctatus
 Ictalurus nebulosus
 Noturus funebris
 Norurus leptacanthus
 Pylodictus olivaris
 Fundulus stellifer
 Ambloplites ariommus
 Lepomis machrochirus
 Lepomis megalotis
 Lepomis cyanellus
 Lepomis puctatus
 Micropterur coosae
 Micropterus punctulatus
 Micropterus salmoides
 Pomoxis annularis
 Pomoxis nigromaculatus
 Etheostoma coosae
 Etheostoma jordani
 Etheostoma stigmaeum
 Percina caprodes
 Percina palmaris

Common Name

Southern brook lamprey
 Least brook lamprey
 Gulf brook lamprey
 Chain pickerel
 Stoneroller
 Lined chub
 Burrhead shiner
 Rough shiner
 Blue shiner
 Alabama shiner
 Rainbow shiner
 Mountain shiner
 Silver stripe shiner
 Tricolor shiner
 Mimic shiner
 Coosa shiner
 Bandfin shiner
 Blacknose dace
 Riffle minnow
 Bullhead minnow
 Creek club
 White catfish
 Blue catfish
 Black bullhead
 Channel catfish
 Brown bullhead
 Black madtom
 Speckled madtom
 Flathead catfish
 Southern studfish
 Shadow bass
 Bluegill
 Longear sunfish
 Green sunfish
 Spotted sunfish
 Redeye bass
 Spotted bass
 Largemouth bass
 White crappie
 Black crappie
 Coosa darter
 Green-breasted darter
 Speckled darter
 Logperch
 Bronzedarter

FISH (Continued)

Scientific Name

Percina nigrofasciata

Cottus caralinae

Hypentelium etowanum

Moxostoma carinatum

Moxostoma duquesnei

Moxostoma erythrurum

Moxostoma poecilurum

Typhlichthys subterraneus

Common Name

Blackbanded darter

Banded sculpin

Alabama hog sucker

Silver redhorse

Black redhorse

Golden redhorse

Blacktail redhorse

Southern cavefish

BIRDS

<u>Scientific Name</u>	<u>Common Name</u>	<u>Occurrence*</u>
<i>Gavia immer</i>	Common Loon	L
<i>Podilymbus podiceps</i>	Pied-billed Grebe	
<i>Podiceps auritus</i>	Horned Grebe	L
<i>Pelecanus erythrorhynchos</i>	American White Pelican	L
<i>Phalacrocorax auritus</i>	Double-crested Cormorant	L
<i>Botaurus lentiginosus</i>	American Bittern	
<i>Ixobrychus exilis</i>	Least Bittern	L
<i>Ardea herodias</i>	Great Blue Heron	
<i>Casmerodius albus</i>	Great Egret	
<i>Bobolius ibis</i>	Cattle Egret	
<i>Butorides virescens</i>	Green-backed Heron	
<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	
<i>Nyctanassa vidacea</i>	Yellow-crowned Night Heron	
<i>Olor columbianus</i>	Tundra Swan	R,L
<i>Chen hyperborea</i>	Snow Goose	L
<i>Branta canadensis</i>	Canada Goose	L
<i>Aix sponsa</i>	Wood Duck	
<i>Anas carolinensis</i>	Green-winged Teal	L
<i>Anas rubripes</i>	American Black Duck	L
<i>Anas platyrhynchos</i>	Mallard	
<i>Anas acuta</i>	Northern Pintail	L
<i>Anas discors</i>	Blue-winged Teal	
<i>Anas strepera</i>	Gadwall	L
<i>Spatula clypeata</i>	Northern Shoveler	L
<i>Mareca americana</i>	American wigeon	L
<i>Aythya valisineria</i>	Canvasback	L
<i>Aythya americana</i>	Redhead	L
<i>Aythya collaris</i>	Ring-necked Duck	
<i>Aythya marila</i>	Greater scaup	L
<i>Aythya affinis</i>	Lesser Scaup	L
<i>Clangula hyemalis</i>	Oldsquaw	L,R
<i>Melanitta perspicillata</i>	Surf Scoter	L,R
<i>Melanitta delandi</i>	White-winged Scoter	L,R
<i>Bucephala clangula</i>	Common Goldeneye	L
<i>Bucephala albeola</i>	Bufflehead	L
<i>Lophodytes cucullatus</i>	Hooded Merganser	
<i>Mergus merganser</i>	Common Merganser	L
<i>Mergus serrator</i>	Red-breasted Merganser	L
<i>Oxyura jamaicensis</i>	Rudy Duck	L
<i>Coragyps atratus</i>	Black Vulture	
<i>Cathartes aura</i>	Turkey Vulture	
<i>Pandion haliaetus</i>	Osprey	L
<i>Haliaeetus leucocephalus</i>	Bald Eagle	L
<i>Circus cyaneus</i>	Norther Harrier	
<i>Accipiter striatus</i>	Sharp-shinned Hawk	

BIRDS (Continued)

<u>Scientific Name</u>	<u>Common Name</u>	
Accipiter cooperil	Cooper's Hawk	
Buteo lineatus	Red-shoulder Hawk	
Buteo platypterus	Broad-winged Hawk	
Buteo jamaicensis	Red-tailed Hawk	
Buteo lagopus	Rough-legged Hawk	
Falco sparverius	American Kestrel	
Falco columbarius	Merlin	R
Falco peregrinus	Peregrine Falcom	R
Meleagris gallopavo	Wild Turkey	
Colinus virginianus	Northern Bokbwhite	
Rallus elegans	King Rail	L
Rallus limicola	Virginia Rail	L
Porzana carolina	Sora	
Fulica americana	American Coot	L
Squatarola squatarola	Black-bellied Plover	L
Pluvialis dominica	Lesser Golder Plover	L
Charadrius semipallmatus	Semi-palmed Plover	L
Charadrius vociferus	Killdeer	
Recurvarostr americana	American Avocet	L
Totanus melanoleucos	Greater Yellowlegs	L
Totanus flavipes	Lesser Yellowlegs	L
Tringa solitaria	Solitary Sandpiper	
Actitis macularia	Spotted Sandpiper	
Numenius phaeopus	Whimbrel	L,R
Limosa fedoa	Marbled Godwit	L,R
Arenaria interpres	Ruddy Turnstone	
Crocethia alba	Sanderling	L
Ereunetes pusillos	Semi Palmated Sandpiper	
Ereunetes mauri	Western Sandpiper	
Erolia minutilla	Least Sandpiper	
Erolia fusicollis	White-rumped Sandpiper	L,R
Erolia bairdii	Baird's Sandpiper	L,R
Erolia melanotos	Pectoral Sandpiper	L
Erolia alpina	Dunlin	
Micropalama himantopus	Stilt Sandpiper	L
Tryngites subruficollis	Buff-breasted Sandpiper	L,R
Limnodromus griseus	Short-billed Dokwitcher	
Capella gallinago	Common Snipe	
Philohela minor	American Woodcock	
Larus pipixcan	Franklin's Gull	R
Larus philadelphia	Bonapart's Gull	L
Larus delawarensis	Ring-billed Gull	L
Larus argentatus	Herring Gull	L
Larus hyperboreus	Glaucous Gull	L,R
Larus marinus	Great Black-backed Gull	L,R
Hydroprogne caspia	Caspian Tern	L

BIRDS (Continued)

<u>Scientific Name</u>	<u>Common Name</u>	
<i>Sterna hirundo</i>	Common Tern	L
<i>Sterna forsteri</i>	Forster's Tern	L
<i>Chidonias niger</i>	Black Tern	L
<i>Columba livia</i>	Rock Dove	
<i>Zenaidura macuoura</i>	Mourning Dove	
<i>Coccyzus americanus</i>	Black-billed Cuckoo	
<i>Coccyzus erythrophthalmus</i>	Yellow-billed Cuckoo	
<i>Tyto alba</i>	Barn Owl	
<i>Otus asio</i>	Eastern Screech Owl	
<i>Bubo virginianus</i>	Great Horned Owl	
<i>Strix varia</i>	Barred Owl	
<i>Asio flammeus</i>	Short-eared Owl	L, R
<i>Chordeiles minor</i>	Common Night Hawk	
<i>Caprimulgus carolinensis</i>	Chuck-wills-widow	
<i>Caprimulgus vociferus</i>	Whip-poor-will	
<i>Chaetura pelagica</i>	Chimney Swift	
<i>Archilochus colubris</i>	Ruby-throated Hummingbird	
<i>Megaceryle alcyon</i>	Belted Kingfisher	
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	
<i>Centurus carolinus</i>	Red-bellied Woodpecker	
<i>Sphyrapicus vaius</i>	Yellow-bellied Sapsucker	
<i>Dendrocopos pubescens</i>	Downy Woodpecker	
<i>Dendrocopos villosus</i>	Hairy Woodpecker	
<i>Colaptes auratus</i>	Northern Flicker	
<i>Dryocopus pileatus</i>	Pileated Woodpecker	
<i>Nottallornis borealis</i>	Olive-sided Flycatcher	
<i>Contopus virens</i>	Eastern Wood Pewee	
<i>Empidonax virescens</i>	Acadian Flycatcher	
<i>Empidonax trailli</i>	Alder Flycatcher	R
<i>Empidonax minimus</i>	Least Flycatcher	R
<i>Sayornis phoebe</i>	Eastern Phoebe	
<i>Myiarchus crinitus</i>	Great Crested Flycatcher	
<i>Tyrannus tyrannus</i>	Eastern Kingbird	
<i>Eremophila alpestris</i>	Horned Lark	
<i>Progne subis</i>	Purple Martin	
<i>Iridoprocne bicolor</i>	Tree Swallow	
<i>Stelgidopteryx ruficollis</i>	Northern Rough-winged Swallow	
<i>Riparia riparia</i>	Bank Swallow	
<i>Petrochelidon pyrrhonta</i>	Cliff Swallow	
<i>Hirundo rustica</i>	Barn Swallow	
<i>Cyanocitta cristata</i>	Blue Jay	
<i>Corvus brachyrhynchos</i>	American Crow	
<i>Parus carolinensis</i>	Carolina Chickadee	
<i>Parus bicolor</i>	Tufted Titmouse	
<i>Sitta canadensis</i>	Red-breasted Nuthatch	
<i>Sitta carolinensis</i>	White-breasted Nuthatch	

BIRDS (Continued)

<u>Scientific Name</u>	<u>Common Name</u>	
<i>Certhia familiaris</i>	Brown Creeper	
<i>Thryothorus ludovicianus</i>	Carolina Wren	
<i>Troglodytes aedon</i>	House Wren	
<i>Troglodytes troglodytes</i>	Winter Wren	
<i>Cristothorus platensis</i>	Sedge Wren	L
<i>Telmatodytes palustris</i>	Marsh Wren	L
<i>Regulus satrapa</i>	Golden-crowned Kinglet	
<i>Regulus calendular</i>	Ruby-crowned Kinglet	
<i>Polioptila caerulea</i>	Blue-gray Gnatcatcher	
<i>Sialia sialis</i>	Eastern Bluebird	
<i>Hylocichla fuscescens</i>	Veery	
<i>Hylocichla minima</i>	Gray-cheeked Thrush	
<i>Hylocichla ustulata</i>	Swainson's Thrush	
<i>Hylocichla guttata</i>	Hermit Thrush	
<i>Hylocichla mustelina</i>	Wood Thrush	
<i>Turdus migratorius</i>	American Robin	
<i>Dumetella carolinensis</i>	Gray Catbird	
<i>Mimus polyglottos</i>	Northern Mockingbird	
<i>Toxostoma rufum</i>	Brown Thrasher	
<i>Anthus spinoletta</i>	American Pipit	
<i>Bombycilla cedrorum</i>	Cedar Waxwing	
<i>Lanius ludovicianus</i>	Loggerhead Shrike	
<i>Sturnus vulgaris</i>	European Starling	
<i>Vireo griseus</i>	White-eyed Vireo	
<i>Vireo solitarius</i>	Solitary Vireo	
<i>Vireo flavifrons</i>	Yellow-throated Vireo	
<i>Vireo philadelphicus</i>	Philadelphia Vireo	
<i>Vireo olivaceus</i>	Red-eyed Vireo	
<i>Vireo gilvus</i>	Warbling Vireo	R
<i>Vermivora pinus</i>	Blue-winged Warbler	
<i>Vermivora chrysoptera</i>	Golden-winged Warbler	
<i>Vermivora peregrina</i>	Tennessee Warbler	
<i>Vermivora celata</i>	Orange-crowned Warbler	
<i>Vermivora ruficapilla</i>	Nashville Warbler	R
<i>Parula americana</i>	Northern Parula	
<i>Dendroica petechia</i>	Yellow Warbler	
<i>Dendroica pensylvanica</i>	Chestnut-sided Warbler	
<i>Dendroica magnolia</i>	Magnolia Warbler	
<i>Dendroica tigrina</i>	Cape May Warbler	
<i>Dendroica caerulescens</i>	Black-throated Blue Warbler	R
<i>Dendroica coronata</i>	Yellow-rumped Warbler	
<i>Dendroica virens</i>	Black-throated Green Warbler	
<i>Dendroica fusca</i>	Blackburnian Warbler	
<i>Dendroica dominica</i>	Yellow-throated Warbler	
<i>Dendroica pinus</i>	Pine Warbler	
<i>Dendroica discolor</i>	Prairie Warbler	

BIRDS (Continued)

<u>Scientific Name</u>	<u>Common Name</u>	
Dendroica palmarum	Palm Warbler	
Dendroica castanea	Bay-breasted Warbler	
Dendroica striata	Blackpoll Warbler	
Dendroica cerulea	Cerulean Warbler	
Mniotilta varia	Black-and-white Warbler	
Setophaga ruticilla	American Redstart	
Protonotaria citrea	Prothonotary Warbler	
Helmitheros vermivorus	Worm-eating Warbler	
Limnolophus swainsonii	Swainson's Warbler	
Sciurus aurocapillus	Ovenbird Warbler	
Sciurus noveboracensis	Northern Waterthrush	
Sciurus motacilla	Louisiana Waterthrush	
Geothlypis trichas	Yellowthroat	
Oporornis formosus	Kentucky Warbler	
Oporornis agillis	Connection Warbler	R
Oporornis philadelphia	Mourning Warbler	R
Wilsonia citrina	Hooded Warbler	
Wilsonia pusilla	Wilson's Warbler	R
Wilsonia canadensis	Canada Warbler	R
Icteria virens	Yellow-breasted Chat	
Piranga rubra	Summer Tanager	
Piranga olivacea	Scarlet Tanager	
Richmondia cardinalis	Northern Cardinal	
Pheucticus ludovicianus	Rose-breasted Grosbeak	
Hispaniolana vespertina	Evening Grosbeak	
Guiraca caerulea	Blue-breasted Grosbeak	
Passerina cyanea	Indigo Bunting	
Spora americana	Dickcissel	
Pipilo erythrophthalmus	Rufous-sided Towhee	
Passer domesticus	House Sparrow	
Spizella passerina	Chipping Sparrow	
Spizella pusilla	Field Sparrow	
Poocetes gramineus	Vesper Sparrow	
Passerculus sandwichensis	Savannah Sparrow	
Ammocramus savannarum	Grasshopper Sparrow	
Passerella iliaca	Fox Sparrow	
Melospiza lincolni	Lincoln's Sparrow	R
Melospiza georgiana	Swamp Sparrow	
Melospiza melodia	Song Sparrow	
Zonotrichia albicollis	White-throated Sparrow	
Zonotrichia leucophrys	White-crowned Sparrow	
Junco hyemalis	Dark-eyed Junco	
Dolichonyx oryzivorus	Bobolink	
Agelaius phoeniceus	Red-winged Blackbird	
Sturnella magna	Eastern Meadowlark	
Euphagus carolinus	Rusty Blackbird	

BIRDS (Continued)

Scientific Name

Common Name

Quiscalus quiscula

Common Grackle

Molothru ater

Brown-headed Cowbird

Icterus spurius

Orchard Oriole

Icterus galbula

Northern Oriole

Carpodacus purpureus

Purple Finch

Carpodacus mexicanus

House Finch

Loxia curvirostra

Red Crossbill

R

Spinus tristis

American Goldfinch

Spinus pinus

Pine Siskin

* R - Rare, but could occur in the area, based on records in adjacent areas.

L - Species would occur in area if large lakes, marshes, or mud flats were included.

ENDANGERED OR THREATENED SPECIES

Section 7 of the Endangered Species Act of 1973 requires that Federal agencies ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or modification of critical habitat of such species. Informal consultation with the U.S. Fish and Wildlife Service (FWS) has been continuous throughout the planning process. Additional consultation will take place before any development plans are implemented.

The 1978 amendments to the Endangered Species Act require that a "biological assessment" (a site-specific and detailed evaluation of effects on endangered or threatened species) be conducted prior to the construction or implementation of a Federal action which could impact endangered or threatened species.

Special management protection will be given to those plants and animals that are listed as endangered or threatened species. As management needs and strategies become identified through continuing research, specific management plans will be developed for some individual species. The National Park Service will consult with the FWS before implementing any action that may affect listed species.

The FWS's assistance was sought in identifying federally listed endangered or threatened species occurring on Lookout Mountain, as well as, other fauna. The listed species are as follows:

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Sarracenia oreophila</i>	Green pitcher plant	Endangered
<i>Sagittaria secundifolia</i>	Kral's water plantain	Threatened
<i>Ptilimnium nodosum</i>	Harperilla	Endangered
<i>Myotis grisescens</i>	Gray myotis	Endangered
<i>Myotis sodalis</i>	Indiana myotis	Endangered

There are two candidate species under status review for possible listing.

<i>Coreopsis pulchra</i>	a sunflower
<i>Cuscuta harperi</i>	a dodder

Populations of the above two candidate species also are associated with the Little River.

The importance of Little River and Lookout Mountain to federally listed and candidate species is demonstrated by the number of species encountered. The fact that populations of five listed species occur in the study area demonstrates its importance from an endangered species standpoint. The FWS indicates that the faunal lists (see appendix) are evidence of the area's high biological diversity and productivity. They state, "We believe that Little River Canyon provides unique habitat within the State of Alabama and the southeast. The Fish and Wildlife Service would fully support the establishment of any Federal park or recreation designation for the Lookout Mountain study area."

The FWS believes the study area supports 50 species of mammals, 49 taxa of reptiles, 30 taxa of amphibians, and 53 species of fish. Two hundred and thirty-nine species of birds also use the Lookout Mountain area including Weiss Lake near the Little River inlet. These lists (see appendix) were developed from accepted range maps and professional experience in the study area. No attempt was made to corroborate species included with actual collection data.

Each Probate Judge, Sheriff, and the Clerk and Register of the Circuit Court is required by law to preserve this slip or pamphlet in a book kept in his office until the Act is published in permanent form.

ALABAMA LAW

(Regular Session, 1969)

Act No. 465

S.J.R. 68—Stone

SENATE JOINT RESOLUTION

WHEREAS, the Little River Canyon is one of the extraordinary natural resource features of the State of Alabama, and

WHEREAS, that portion of the State of Alabama in which the Little River is situated exists in proximity to major population and commercial centers of the Southeast, and

WHEREAS, due to a rising standard of living, increased mobility, and shorter working hours, the recreational demands of the citizens of the State of Alabama and of neighboring States are increasing, and

WHEREAS, the Little River exists in an unpolluted and near pristine condition, and

WHEREAS, rivers flowing unimpeded by impoundment and diversions are becoming a rare exception in the State of Alabama and nationwide, and

WHEREAS, the historical values related to the Little River and dating from Hernando DeSoto's exploration in the 16th century are of increasingly wide public interest, and

WHEREAS, many of the extraordinary scenic and natural attributes of the Little River from State Highway 35 downstream through Little River Canyon Mouth County Park are on lands now owned by the State of Alabama, and are included within the DeSoto State Park, and

WHEREAS, there is concurrence in the views of private citizens of Cherokee and DeKalb Counties and conservation and recreation agencies that the values of the Little River, its canyon and surrounding environment, comprise an outstanding and rare natural phenomenon of immeasurable wealth to the citizens of the State of Alabama and their posterity.

NOW, THEREFORE, BE IT RESOLVED BY THE LEGISLATURE OF ALABAMA, BOTH HOUSES THEREOF CON-

CURRING, That it is incumbent upon the people of the State of Alabama to perpetuate and preserve all or portions of the Little River in its wild, scenic, and unimpaired condition as a unique Alabama resource for outdoor recreation purposes.

BE IT FURTHER RESOLVED, that it shall be the public policy of the State of Alabama to protect the Little River resource from deterioration of its irreplaceable natural features and qualities.

BE IT FURTHER RESOLVED, that it shall be the public policy of the State of Alabama to recognize recreation and fish and wildlife as important legal, beneficial uses of the Little River resource.

BE IT FURTHER RESOLVED, that litter, garbage, car bodies, or refuse of any kind shall not be deposited within the canyon of the Little River.

BE IT FURTHER RESOLVED, that those State of Alabama lands and reaches of the river within the DeSoto State Park and south of the State Highway 35 bridge through which the Little River flows, be designated a State Wild and Scenic River.

BE IT FURTHER RESOLVED, that appropriate State of Alabama agencies are directed to further study, assess and evaluate the Little River resource, to determine and make recommendations to the Governor and the State Legislature for its preservation and compatible uses. A report of the findings and recommendations shall be made to the legislature by July 1, 1970. The recommendations shall be accompanied by a report showing the proposed area, classification, the characteristics which qualify the river or section of river for designation as a Wild and Scenic River, ownership and use of land in the area, the State agency by which the area should be administered, and the estimated costs of acquiring fee title and scenic easements and of developing and administering the area as a Wild and Scenic River. Such studies may be conducted in cooperation with appropriate agencies of the local government and the United States.

BE IT FURTHER RESOLVED, that it be determined which recreational activities including but not limited to hiking, camping, boating, fishing, sightseeing, and hunting, together with necessary support facilities are consonant with public use and the perpetuation of the existing character of the Little River.

BE IT FURTHER RESOLVED, that appropriate State of Alabama agencies confer with the owners of real property and rights adjacent to or related to the Little River resource to determine what cooperative actions can be taken to protect and enhance and provide for compatible public use of this important natural resource.

Approved August 19, 1969.

Time: 9:03 A.M.

I hereby certify that the foregoing copy of an Act of the Legislature of Alabama has been compared with the enrolled Act and it is a true and correct copy thereof.

Given under my hand this 25th day of August, 1969.

McDOWELL LEE
Secretary of Senate